

# HARRIS COUNTY REQUEST FOR PROPOSAL

Job No. 14/0317

PROPOSAL FOR: Furnish and Install Internet Protocol Based CCTV Video Surveillance Camera Systems at Two (2) Residential Facilities for Harris County Juvenile Probation Department

**DUE DATE:** MONDAY, JANUARY 26, 2015 Due no later than 2:00 P.M. local time in Houston, Texas. Proposals received later than the date and time above will not be considered. **OFFERORS NOTE:** Carefully read all instructions, requirements and specifications. Fill out all forms properly and completely. Submit your proposal with all appropriate supplements and/or samples in an appropriately sized envelope or box. PACKAGE MUST SHOW THE JOB NUMBER, DESCRIPTION AND BE MARKED "SEALED PROPOSAL". **RETURN PROPOSAL TO:** HARRIS COUNTY PURCHASING AGENT 1001 PRESTON AVENUE, SUITE 670 **HOUSTON, TEXAS 77002** Buyer: Deborah Lasker (713) 755-5743 or deborah.lasker@pur.hctx.net Total Amount of Proposal: \$ Company Name: Company Address: City, State, Zip Code: Taxpayer Identification Number (T.I.N.): Telephone: e-mail: Do you carry Health Insurance on your employees? \_\_\_\_Yes \_\_\_ No If yes, what % of employees: % How did you hear of this job? Newspaper Other Print Name\_\_\_\_

Vendor must sign in INK; failure to sign WILL disqualify the offer. All prices must be typewritten or written in ink.

Revised 07/13

# **TABLE OF CONTENTS**

This bid/proposal package includes the components checked below. If the item **is not** checked, it is not applicable to this bid/proposal. Offerors are asked to review the documentation to be sure that all applicable parts are included. If any portion of the documentation is missing, notify the Purchasing Department immediately. Offeror should be thoroughly familiar with all of the following items applicable to the bid/proposal before submitting an offer.

X	1.	Cover She	et -	Complete this page, sign IN INK and return it.	
X	2.	Table of C	onte	ents - This page lists the applicable components of this bid/proposal documentation.	
X	3.	<b>General Requirements</b> - It is offeror's responsibility to be thoroughly familiar with the General Requirements.			
X	4.	<b>Special Requirements/Instructions</b> - This section provides information needed in order to make an offer properly. Special requirements supersede General Requirements when applicable.			
X	5.	<b>Specifications</b> - This section contains a detailed description of the goods/services sought by the County.			
X	6.	<b>Pricing/Delivery Information</b> - This form is used to solicit exact pricing of goods/services, delivery, and other costs.			
X	7.	Attachmen X	its a.	Tax Form/Debt/Residence Certification - Complete this form and return it with your offer.	
			b.	Bid Guaranty & Performance Bond Information & Requirements - This form applies only to certain bids/proposals. All public work contracts over \$25,000 require a Payment Bond and over \$100,000 must also have a Performance Bond, in a form approved by the County. Please read carefully and fill out completely.	
			c.	<b>Bid Check Return Authorization Form</b> - This form applies only to certain bids/proposals. Read this form carefully and fill it out completely.	
			d.	Vehicle Delivery Instructions - Included only when purchasing vehicles.	
		<u>X</u>	e.	Minimum Insurance Requirements - Included in specific requirements when applicable (does not supersede "Hold Harmless" section of General Requirements).	
		<u>X</u>	f.	Worker's Compensation Insurance Coverage Rule 110.110 - This requirement is applicable for a building or construction contract.	
			g.	<b>Financial Statement</b> - When this information is required, you must use this form or submit acceptable financial documents.	
		<u>X</u>	h.	Reference Sheet	
			i.	HIPAA Requirements	
		X	j.	Diagrams	

#### **GENERAL REQUIREMENTS FOR PROPOSALS**

# READ THIS ENTIRE DOCUMENT CAREFULLY. FOLLOW ALL INSTRUCTIONS. YOU ARE RESPONSIBLE FOR FULFILLING ALL REQUIREMENTS AND SPECIFICATIONS. BE SURE YOU UNDERSTAND THEM.

General Requirements apply to all advertised requests for proposals; however, these may be superseded, whole or in part, by OTHER DATA CONTAINED HEREIN. Review the Table of Contents. Be sure your proposal package is complete.

#### ACCESS TO RECORDS

In special circumstances, vendor may be required to allow duly authorized representatives of Harris County, the Harris County Hospital District or the state and federal government access to contracts, books, documents, and records necessary to verify the nature and extent of the cost of services provided by vendor. Vendor must keep records within Harris County or note in proposal that records will be available within the boundaries of Harris County to those representatives within twenty-four (24) hours of request by the County.

#### **ACH VENDOR PAYMENT (Automated Clearinghouse)**

Harris County offers ACH vendor payment services for all vendors providing products or services. Instructions and authorization agreement forms are provided at <a href="https://www.hctx.net/auditor/">www.hctx.net/auditor/</a>.

#### **ADDENDA**

When specifications are revised, the Harris County Purchasing Department will issue an addendum addressing the nature of the change. Offerors must sign and include it in the returned proposal package.

#### ASSIGNMENT

The successful offeror may not assign, sell or otherwise transfer this contract without written permission of Harris County Commissioners Court or other applicable governing body.

#### **AWARD**

Harris County reserves the right to award this contract on the basis of LOWEST AND BEST OFFER in accordance with the laws of the State of Texas, to waive any formality or irregularity, to make awards to more than one offeror, to reject any or all proposals. In the event the lowest dollar offeror meeting specifications is not awarded a contract, the offeror may appear before the Commissioners Court, Hospital District Board of Managers, the Juvenile Board or other applicable governing body and present evidence concerning his responsibility after officially notifying the Office of the Purchasing Agent of his intent to appear.

#### **BONDS**

If this bid requires submission of proposal guarantee and performance and payment bonds, there will be a separate page explaining those requirements. Proposals submitted without the required proposal bond or cashier's checks are not acceptable.

# CERTIFICATION REGARDING DEBARMENT, SUSPENSION INELIGIBILITY, AND VOLUNTARY EXCLUSION

The Contractor certifies by execution of this Contract that it is not ineligible for participation in federal or state assistance programs under Executive Order 12549, "Debarment and Suspension." Additionally, contractor warrants and represents by execution of this Contract that it is not debarred, suspended, or otherwise excluded from or ineligible for participation in any Federal programs, including but not limited to the following: Department of Health and Human Work (DHHS), Office of Inspector General (OIG) - List of Excluded Individuals & Entities (LEIE); U.S. General Work Administration (GSA) - Excluded Parties List System (EPLS); All States (50) Health & Human Work Commission Medicaid OIG Sanction List; Government Terrorist Watch List (OFAC / Patriot Act); Department of Commerce, Bureau of Industry and Security, Denied Persons List; and Department of Homeland Security, Immigration and Customs Enforcement (ICE) Most Wanted. The Contractor further agrees to include this certification in all contracts between itself and any subcontractors in connection with the services performed under this Contract. Contractor also certifies that contractor will notify Harris County in writing immediately if contractor is not in compliance with Executive Order 12549 during the term of this contract. Contractor agrees to refund Harris County for any payments made to the contractor while ineligible.

#### COMPLIANCE WITH FEDERAL, STATE, AND LOCAL LAWS

The vendor shall follow all federal, state, and local laws, rules, codes, ordinances, and regulations applicable to the vendor's Services.

The vendor warrants and represents that it will pay all its workers all monies earned by its workers including, but not limited to regular wages, any overtime compensation, or any additional payments pursuant to the Fair Labor Standards Act, 29 U.S.C. Section 207 9a(1), as amended; the Texas Pay Day Act; the Equal Pay Act; Title VII of the Civil Rights Act of 1964, 42 U.S.C. Section 2000e, *et al.*, as amended; or any provisions of the Texas Labor Code Ann., as amended.

#### CONTRACT OBLIGATION

Harris County Commissioners Court must award the contract and the County Judge or other person authorized by the Harris County Commissioners Court must sign the contract before it becomes binding on Harris County or the offerors. Department heads are NOT authorized to sign agreements for Harris County. Binding agreements shall remain in effect until all products and/or services covered by this purchase have been satisfactorily delivered and accepted.

#### **CONTRACT RENEWALS**

Renewals may be made ONLY by written agreement between Harris County and the offeror. Any price escalations are limited to those stated by the offeror in the original proposal.

#### CONTRACT TRANSITION

In the event services end by either contract expiration or termination, it shall be required that the vendor continue services if requested by Harris County Purchasing, until new services can be completely operational. The vendor acknowledges its responsibility to cooperate fully with the replacement vendor and Harris County to ensure a smooth and timely transition to the replacement vendor. Such transitional period shall not extend more than ninety (90) days beyond the expiration/termination date of the contract, or any extension thereof. The vendor shall be reimbursed for services during the transitional period at the rate in effect when the transitional period clause is invoked by Harris County. During any transition period, all other terms and conditions of the contract shall remain in full force and effect as originally written and subsequently amended.

#### **DIGITAL FORMAT**

If offeror obtained the bid specifications in digital format in order to prepare a response, *the* **proposal** *must be submitted in hard copy* according to the instructions contained in this proposal package. If, in its proposal response, offeror makes any changes whatsoever to the County's published proposal specifications, the County's proposal specifications *as published* shall control. Furthermore, if an alteration of any kind to the County's published proposal specifications is only discovered after the contract is executed and is or is not being performed, the contract is subject to immediate cancellation.

#### DISQUALIFICATION OF OFFEROR

Upon signing this bid document, an offeror offering to sell supplies, materials, services, or equipment to Harris County certifies that the offeror has not violated the antitrust laws of this state codified in Texas Business and Commerce Code §15.01, et seq., as amended, or the federal antitrust laws, and has not communicated directly or indirectly the bid made to any competitor or any other person engaged in such line of business. Any or all proposals may be rejected if the County believes that collusion exists among the offerors. Proposals in which the prices are obviously unbalanced may be rejected. If multiple proposals are submitted by an offeror and after the proposals are opened, one of the proposals is withdrawn, the result will be that all of the proposals submitted by that offeror will be withdrawn; however, nothing herein prohibits a vendor from submitting multiple proposals - for different products or services.

#### E-MAIL ADDRESSES CONSENT

Vendor affirmatively consents to the disclosure of its e-mail addresses that are provided to Harris County, the Harris County Flood Control District, the Harris County Hospital District including its HMO, the Harris County Appraisal District, or any agency of Harris County. This consent is intended to comply with the requirements of the Texas Public Information Act, Tex. Gov't Code Ann. §552.137, as amended, and shall survive termination of this agreement. This consent shall apply to e-mail addresses provided by Vendor, its employees, officers, and agents acting on Vendor's behalf and shall apply to any e-mail address provided in any form for any reason whether related to this bid/proposal or otherwise.

#### **EVALUATION**

Evaluation shall be used as a determinant as to which proposed items or services are the most efficient and/or most economical for the County. It shall be based on all factors which have a bearing on price and performance of the items in the user environment. All proposals are subject to negotiations by the Harris County Purchasing Department with recommendation to the appropriate governing body. Compliance with all requirements, delivery and needs of the using department are considerations in evaluating proposals. **Pricing is NOT the only criteria for making a recommendation**. A preliminary evaluation by Harris County will be held and appropriate proposals will be subjected to the negotiating process and a request for a Best and Final Offer. Upon completion of the negotiations, Harris County will make an award. All proposals that have been submitted shall be available and open for public inspection after the contract is awarded except for trade secrets or confidential information contained in the proposals and identified as such.

#### FISCAL FUNDING

A multi-year lease or lease/purchase arrangement (if requested by the Special Requirements/Instructions), or any contract continuing as a result of an extension option, must include a fiscal funding out provision in the lease or contract. If, for any reason, funds are not appropriated by the applicable governing body to continue the lease or contract in their sole discretion, said lease or contract shall become null and void on the last day of the current appropriation of funds. After expiration of the lease, leased equipment shall be removed by the offeror from the using department without penalty of any kind or form to Harris County. All charges and physical activity related to delivery, installation, removal and redelivery shall be the responsibility of the offeror.

#### **GOVERNING FORMS**

In the event of any conflict between the terms and provisions of these requirements and the specifications, the specifications shall govern. In the event of any conflict of interpretation of any part of this overall document, Harris County's interpretation shall govern.

#### **GOVERNING LAW**

This request for proposal is governed by the competitive bidding requirements of the County Purchasing Act, Texas Local Government Code, §262.021 *et seq.*, as amended. Offerors shall comply with all applicable federal, state and local laws and regulations. Offeror is further advised that these requirements shall be fully governed by the laws of the State of Texas and that Harris County may request and rely on advice, decisions and opinions of the Attorney General of Texas and the County Attorney concerning any portion of these requirements. Forum for contractual issues shall be in Texas and venue shall be exclusively in Houston, Harris County, Texas, in a federal or state court of competent jurisdiction. The County does not agree to binding arbitration and does not waive its right to a jury trial.

#### **GRANT FUNDING**

Any contract entered into by the County that is to be paid from grant funds shall be limited to payment from the grant funding and the vendor/provider understands that the County has not set aside any County funds for the payment of obligations under a grant contract. If grant funding should become unavailable at any time for the continuation of services paid for by the grant, and further funding cannot be obtained for the contract, then the sole recourse of the provider shall be to terminate any further services under the contract and the contract shall be null and void.

#### **HIPAA COMPLIANCE**

Offeror agrees to comply with the requirements of the Health Insurance Portability and Accountability Act of 1996, Pub. L. No. 104-191 (codified at 45 C.F.R. Parts 160 and 164), as amended ("HIPAA"); privacy and security regulations promulgated by the United States Department of Health and Human Services ("DHHS"); Title XIII, Subtitle D of the American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, as amended ("HITECH Act"); provisions regarding Confidentiality of Alcohol and Drug Abuse Patient Records (codified at 42 C.F.R. Part 2), as amended; and TEX. HEALTH & SAFETY CODE ANN. §§ 81.046, as amended, 181.001 et seq., as amended, 241.151 et seq., as amended, and 611.001 et seq., as amended collectively referred to as "HIPAA", to the extent that the Offeror uses, discloses or has access to protected health information as defined by HIPAA. Offeror may be required to enter a Business Associate Agreement pursuant to HIPAA.

#### HOLD HARMLESS AGREEMENT

Contractor, the successful offeror, shall indemnify, defend, and hold Harris County harmless from all claims for personal injury, death and/or property damage resulting directly or indirectly from contractor's performance. Contractor shall procure and maintain, with respect to the subject matter of this proposal, appropriate insurance coverage including, as a minimum, public liability and property damage with adequate limits to cover contractor's liability as may arise directly or

indirectly from work performed under terms of this proposal. Certification of such coverage must be provided to the County upon request.

#### **INSPECTIONS & TESTING**

Harris County reserves the right to inspect any item(s) or service location for compliance with specifications and requirements and needs of the using department. If an offeror cannot furnish a sample of a proposed item, where applicable, for review, or fails to satisfactorily show an ability to perform, the County can reject the proposal as inadequate.

#### INVOICES AND PAYMENTS

Offerors shall submit an original invoice on each purchase order or purchase release after each delivery, indicating the purchase order number. Invoices must be itemized. Any invoice, which cannot be verified by the contract price and/or is otherwise incorrect, will be returned to the offeror for correction. Under term contracts, when multiple deliveries and/or services are required, the offeror may invoice following each delivery and the County will pay on invoice. Contracts providing for a monthly charge will be billed and paid on a monthly basis only. Prior to any and all payments made for goods and/or services provided under this contract, the offeror should provide his Taxpayer Identification Number or social security number as applicable. This information must be on file with the Harris County Auditor's office. Failure to provide this information may result in a delay in payment and/or back-up withholding as required by the Internal Revenue Service.

#### **MAINTENANCE**

Maintenance required for equipment proposed should be available in Harris County by a manufacturer-authorized maintenance facility. Costs for this service shall be shown on the Pricing/Delivery Information form. If Harris County opts to include maintenance, it shall be so stated in the purchase order and said cost will be included. Service will commence only upon expiration of applicable warranties and should be priced accordingly.

#### MATERIAL SAFETY DATA SHEETS

Under the "Hazardous Communication Act", commonly known as the "Texas Right To Know Act", an offeror must provide to the County with each delivery, material safety data sheets which are applicable to hazardous substances defined in the Act. Failure of the offeror to furnish this documentation will be cause to reject any proposal applying thereto.

#### NAME BRANDS

Specifications <u>may</u> reference name brands and model numbers. It is not the intent of Harris County to restrict these bids in such cases, but to establish a desired quality level of merchandise or to meet a pre-established standard due to like existing items. Offerors may offer items of equal stature and the burden of proof of such stature rests with offerors. Harris County shall act as sole judge in determining equality and acceptability of products offered.

#### **NEW MILLENIUM COMPLIANCE**

All products and/or services furnished as part of this contract must be compliant for the present year and forward. This applies to all computers including hardware and software as well as all other commodities with date sensitive embedded chips.

#### POTENTIAL CONFLICTS OF INTEREST

An outside consultant or contractor is prohibited from submitting a proposal for services on a Harris County project of which the consultant or contractor was a designer or other previous contributor, or was an affiliate, subsidiary, joint venturer or was in any other manner associated by ownership to any party that was a designer or other previous contributor. If such a consultant or contractor submits a prohibited proposal, that proposal shall be disqualified on the basis of conflict of interest, no matter when the conflict is discovered by Harris County. Potential bidders are advised that they may have disclosure requirements pursuant to Texas Local Government Code, Chapter 176. This law requires persons desiring to do business with the County to disclose any gifts valued in excess of \$250 given to any County Official or the County Official's family member, or employment of any County Official or the County Official's family member during the preceding twelve (12) month period. The disclosure questionnaire must be filed with the Harris County Clerk. Refer to Texas Local Government Code, Chapter 176 for the details of this law.

Contractor shall not use funds to directly or indirectly pay any person for influencing or attempting to influence any public employee or official in connection with the awarding of any contract or the extension, continuation, renewal, amendment or modification of any contract. Additionally, pursuant to 31 U.S.C.A. § 1352 (2003), if at any time during the contract term funding to contractor exceeds \$100,000.00, contractor shall file with the County the Federal Standard Form LLL titled "Disclosure Form to Report Lobbying."

#### PROPOSAL FORM COMPLETION

Fill out and return to the Harris County Purchasing Department ONE (1) complete proposal form in an appropriately sized envelope or box. **PACKAGE MUST SHOW THE JOB NUMBER, DESCRIPTION AND BE MARKED "SEALED PROPOSAL."** An authorized representative of the offeror should sign the Proposal Cover Sheet. The contract will be binding only when signed by Harris County, funds are certified by the County Auditor and or the Hospital District, as applicable, and a Purchase Order issued.

#### PROPOSAL RETURNS

Offerors must return all completed proposals to the Harris County Purchasing Department reception desk at 1001 Preston Avenue, Suite 670, Houston, Texas **before 2:00 P.M. LOCAL TIME IN HOUSTON, TEXAS** on the date specified. <u>Late</u> proposals will not be accepted for any reason.

#### PURCHASE ORDER AND DELIVERY

The successful offeror shall not deliver products or provide services without a Harris County Purchase Order, signed by an authorized agent of the Harris County Purchasing Department. The fastest, most reasonable delivery time shall be indicated by the offeror in the proper place on the Pricing/Delivery Information form. Any special information concerning delivery should also be included, on a separate sheet, if necessary. All items shall be shipped **F.O.B. INSIDE DELIVERY** unless otherwise stated in the specifications. This shall be understood to include bringing merchandise to the appropriate room or place designated by the using department. Every tender or delivery of goods must fully comply with all provisions of these requirements and the specifications including time, delivery and quality. Nonconformance shall constitute a breach which must be rectified prior to expiration of the time for performance. Failure to rectify within the performance period will be considered cause to reject future deliveries and cancellation of the contract by Harris County without prejudice to other remedies provided by law. Where delivery times are critical, Harris County reserves the right to award accordingly.

#### RECYCLED MATERIALS

Harris County encourages the use of products made of recycled materials and shall give preference in purchasing to products made of recycled materials if the products meet applicable specifications as to quantity and quality. Harris County will be the sole judge in determining product preference application.

#### SCANNED OR RE-TYPED RESPONSE

If in its response, offeror either electronically scans, re-types, or in some way reproduces the County's published proposal package, then in the event of any conflict between the terms and provisions of the County's published proposal package, or any portion thereof, and the terms and provisions of the response made by offeror, the County's proposal package *as published* shall control. Furthermore, if an alteration of any kind to the County's published proposal package is only discovered after the contract is executed and is or is not being performed; the contract is subject to immediate cancellation.

#### **SEVERABILITY**

If any section, subsection, paragraph, sentence, clause, phrase or word of these requirements or the specifications shall be held invalid, such holding shall not affect the remaining portions of these requirements and the specifications and it is hereby declared that such remaining portions would have been included in these requirements and the specifications as though the invalid portion had been omitted.

#### SILENCE OF SPECIFICATIONS

The apparent silence of specifications as to any detail, or the apparent omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practice is to prevail and that only material and workmanship of the finest quality are to be used. All interpretations of specifications shall be made on the basis of this statement. The items furnished under this contract shall be new, unused of the latest product in production to commercial trade and shall be of the highest quality as to materials used and workmanship. Manufacturer furnishing these items shall be experienced in design and construction of such items and shall be an established supplier of the item proposed.

#### SUPPLEMENTAL MATERIALS

Offerors are responsible for including all pertinent product data in the returned proposal package. Literature, brochures, data sheets, specification information, completed forms requested as part of the proposal package and any other facts which may affect the evaluation and subsequent contract award should be included. Materials such as legal documents and contractual agreements, which the offeror wishes to include as a condition of the proposal, must also be in the returned proposal package. Failure to include all necessary and proper supplemental materials may be cause to reject the entire proposal.

#### **TAXES**

Harris County is exempt from all federal excise, state and local taxes unless otherwise stated in this document. Harris County claims exemption from all sales and/or use taxes under Texas Tax Code §151.309, as amended. Texas Limited Sales Tax Exemption Certificates will be furnished upon written request to the Harris County Purchasing Agent.

#### **TERM CONTRACTS**

If the contract is intended to cover a specific time period, the term will be given in the specifications under SCOPE.

#### **TERMINATION**

Harris County reserves the right to terminate the contract for default if offeror breaches any of the terms therein, including warranties of offeror or if the offeror becomes insolvent or commits acts of bankruptcy. Such right of termination is in addition to and not in lieu of any other remedies which Harris County may have in law or equity. Default may be construed as, but not limited to, failure to deliver the proper goods and/or services within the proper amount of time, and/or to properly perform any and all services required to Harris County's satisfaction and/or to meet all other obligations and requirements. Harris County may terminate the contract without cause upon thirty (30) days written notice.

#### TERMINATION FOR HEALTH AND SAFETY VIOLATIONS

Harris County has the option to terminate this contract immediately without prior notice if offeror fails to perform any of its obligations in this contract if the failure (a) created a potential threat to health or safety or (b) violated a law, ordinance, or regulation designed to protect health or safety.

#### TITLE TRANSFER

Title and Risk of Loss of goods shall not pass to Harris County until Harris County actually receives and takes possession of the goods at the point or points of delivery. Receiving times may vary with the using department. Generally, deliveries may be made between 8:30 a.m. and 4:00 p.m., Monday through Friday. Offerors are advised to consult the using department for instructions. The place of delivery shall be shown under the "Special Requirements/Instructions" section of this proposal package and/or on the Purchase Order as a "Deliver To:" address.

#### WAIVER OF SUBROGATION

Offeror and offeror's insurance carrier waive any and all rights whatsoever with regard to subrogation against Harris County as an indirect party to any suit arising out of personal or property damages resulting from offeror's performance under this agreement.

#### WARRANTIES

Offerors shall furnish all data pertinent to warranties or guarantees which may apply to items in the proposal. Offerors may not limit or exclude any implied warranties. Offeror warrants that product sold to the County shall conform to the standards established by the U.S. Department of Labor under the Occupational Safety and Health Act of 1970. In the event product does not conform to OSHA Standards, where applicable, Harris County may return the product for correction or replacement at the offeror's expense. If offeror fails to make the appropriate correction within a reasonable time, Harris County may correct at the offeror's expense.

### **VENDORS OWING TAXES OR OTHER DEBTS**

Pursuant to TX Local Government Code 262.0276, Harris County Commissioners Court has adopted a policy which requires that vendors' taxes and other Harris County debts be current as of the date bids/proposals are due. Bidders with delinquent county taxes or other county debts on the due date will not be eligible for award. Whether or not a vendor's taxes are delinquent will be determined by an independent review of the Tax Office records. Prior to submitting an offer, vendors are encouraged to visit the Tax Office website at www.hctax.net, set up a portfolio of their accounts and make their own initial determination of the status of their tax accounts. Vendors who believe a delinquency is reflected in error must contact the Tax Office to correct any errors or discrepancies prior to submitting their offer in order to ensure that their offer will be considered. Furthermore, if, during the performance of this contract, a vendor's taxes become delinquent or a vendor becomes otherwise indebted to Harris County, Harris County reserves the right to provide notice to the Auditor or Treasurer pursuant to Texas Local Government Code §154.045. This policy is effective for all bids/proposals due on or after November 1, 2009.

# SPECIAL REQUIREMENTS/INSTRUCTIONS

The following requirements and instructions supersede General Requirements where applicable.

# **VENDOR INSTRUCTIONS**

Responses to this Request for Proposal (RFP) shall be formatted and organized in the following order for consistency and easy screening:

- All proposals must be typed, single spaced, and printed single-sided on 8 ½" by 11" paper.
- One original, **clearly marked "ORIGINAL"**, and three (3) copies, **clearly marked "COPY"**, must be submitted in separate three-ring, loose-leaf binders with identification of the vendor, the job number as located on the RFP cover sheet, and the RFP title on the front cover. Provide one (1) CD-ROM or flash drive with the complete proposal response in Microsoft Word or Excel format, as applicable.
- The complete proposal response must be sealed in an envelope or box for delivery to the Office of the Harris County Purchasing Agent per instructions in the Proposal Returns paragraph of the General Requirements section.
- All documents must be labeled with the vendor's name and the job number. Any response received by the Office of the Harris County Purchasing Agent that is not identified on the outside with the job number will be at risk for rejection.
- Each section of the vendor's response should start on a new page. A tabbed divider page marked with the section number should separate each section.
- Prepare a Table of Contents for the proposal being submitted and place it before Section I. The Table of Contents must list Sections I-VI and the contents of each section.

Proposals must be submitted in the following order:

### **RFP Cover Sheet**

#### **Table of Contents**

- Section I: Transmittal Letter, Residence Certification (Attachment a), Insurance (Attachment e), and signed Addenda (when applicable; see Addenda under General Requirements) The transmittal letter should include:
  - Company name and address; name, title, email, telephone and fax number of person(s) to be contacted for clarifications or additional information regarding proposal;
  - Name, title, email, telephone and fax number of person authorized to contractually obligate vendor's company with proposal and any future negotiations; and
  - A brief statement summarizing the vendor's understanding of the project and relevant experience

# Section II: Scope of Service/Narrative of Proposed Services

- Describe your firm's philosophy, approach(es) and preferred methods for meeting requirements and/or deliverables in the Specifications.
- Provide the greatest amount of meaningful detail possible to describe the proposed products/services. Indicate if vendor can meet the specifications, or if the specifications can be met only under certain conditions or circumstances. If vendor is not able to meet the specification, briefly explain why, noting any concerns or issues Harris County should be aware of.

# SPECIAL REQUIREMENTS/INSTRUCTIONS (CONTINUED)

• Provide a timeline indicating deliverables, vendor responsibilities and resources needed from Harris County.

Mere reiterations of specifications are strongly discouraged, as they do not provide insight into the vendor's ability to meet the specifications.

- **Section III: Pricing Information** See PRICING/DELIVERY INFORMATION page for instructions.
- Section IV: Organizational Information/Qualifications
  - Vendor's history, background and principal officers
  - Company organization chart
  - Description of project team organization; names and resumes of team members
  - References
- **Section V:** Legal Documents Include any standard agreement(s) and/or contracts(s) associated with vendor's response.
- **Section VI:** Miscellaneous State exceptions to any of the requirements in this RFP, if any. Company brochures, marketing materials, or any other information vendor deems appropriate to the RFP response may be included in this section.

Harris County will not be liable for any costs incurred by the vendor in preparing a response to this RFP. Vendors submit proposals at their own risk and expense. Harris County makes no guarantee that any products or services will be purchased as a result of this RFP, and reserves the right to reject any and all proposals. All proposals and accompanying documentation will become the property of Harris County. All proposals are open to negotiation.

The vendor is expected to examine all documents, forms, specifications, and all instructions. Failure to do so will be at vendor's risk.

At and after opening, proposals will NOT be part of the public record and subject to disclosure, but will be kept confidential until time of award and execution of an agreement. When an award is made and an agreement is executed, proposals are subject to review under the "Public Information Act". To the extent permitted by law, vendors may request in writing non-disclosure of confidential data. Such data shall accompany the proposal, be readily separable from the proposal, and shall be CLEARLY MARKED "CONFIDENTIAL". For those portions identified as confidential by the vendor, Harris County must rely on advice, decisions and opinions of the Attorney General of the State of Texas relative to the disclosure of data or information.

# **EVALUATION PROCESS**

All proposals will be examined by an evaluation committee consisting of various Harris County Juvenile Probation personnel and Harris County Purchasing.

Proposals that do not conform to the instructions or which do not address all the services as specified may be eliminated from consideration. However, Harris County reserves the right to accept such a proposal if it is determined to be in the best interest of Harris County.

# SPECIAL REQUIREMENTS/INSTRUCTIONS (CONTINUED)

While Harris County appreciates a brief, straightforward, concise reply, the proposer must fully understand that the evaluation is based on the information provided. Accuracy and completeness are essential.

Omissions, ambiguous and equivocal statements may be construed against the proposer. The proposal response may be incorporated into any contract which results from this RFP, and vendors are cautioned not to make claims or statements it is not prepared to commit to contractually. Failure of the vendor to meet such claims will result in a requirement that the vendor provide resources necessary to meet submitted claims.

Harris County Purchasing may initiate discussions with selected vendors; however, discussions <u>may not</u> be initiated by vendors. Harris County Purchasing expects to conduct discussions with vendor's representatives authorized to contractually obligate the vendor with an offer. Vendors shall not contact any Harris County personnel during the RFP process without the express permission from the Office of the Harris County Purchasing Agent. Harris County Purchasing may disqualify any vendor who has made site visits, contacted Harris County personnel or distributed any literature without authorization from Harris County Purchasing.

All correspondence relating to this RFP, from advertisement to award shall be sent to the Harris County Purchasing. All presentations and/or meetings between Harris County and the vendor relating to this RFP shall be coordinated by Harris County Purchasing.

Selected vendors may be expected to make a presentation/product demonstration to an evaluation committee. Proposals, vendor presentations and product/service evaluations may develop into negotiating sessions with the vendor(s) as selected by the Evaluation Committee. Harris County expects to conduct negotiations with vendor's representatives authorized to contractually obligate the vendor with an offer. If vendor is unable to agree to contract terms and conditions, Harris County reserves the right to terminate contract negotiations with that vendor and initiate negotiations with another vendor. In addition to a presentation, visits by the Evaluation Committee to representative vendor client sites may be conducted where the proposed solution can be demonstrated in a production environment.

### **EVALUATION CRITERIA**

Award shall be made to the responsible vendor whose proposal is determined to be the best evaluated offer resulting from negotiations and taking into consideration all aspects of proposal impact items and the following in order of relative importance:

- Proposed system;
- Turnaround time for services requested;
- Pricing:
- Past performance history with Harris County (if applicable);
- Vendor's professional reputation for integrity and compliance with state and federal law, including having the appropriate license to do business in Texas; and
- Overall quality of vendor's proposal.

# SPECIAL REQUIREMENTS/INSTRUCTIONS (CONTINUED)

Submission of a proposal implies the vendor's acceptance of the evaluation criteria and vendor's recognition that subjective judgments must be made by the Evaluation Committee.

# **AWARD**

Harris County anticipates awarding to a single vendor. However, Harris County reserves the right to award to more than one vendor if in the best interest of Harris County.

No award can be made until approved by Harris County Commissioners Court. This RFP does not obligate Harris County to the eventual purchase of any product/service described, implied or which may be proposed. Progress toward this end is solely at the discretion of Harris County and may be terminated at any time prior to execution of an agreement.

# **LEGAL DOCUMENTS**

Vendor should submit any agreement for products/services which may be required by the vendor's organization to enter into a contract with Harris County. The awarded vendor will be required to execute an agreement with Harris County which finalizes the terms and conditions set forth in vendor's proposal, best and final offer, and any negotiations between vendor and Harris County. The agreement is subject to review and amendment by the Harris County Attorney's Office.

### **INVOICES**

Vendor shall submit an invoice upon completion of each deliverable. Deliverables will be considered complete only upon written acceptance by Harris County. Each invoice shall include deliverable(s) completed and the price for each. No charges may be billed to Harris County unless such costs are explicitly included in the agreement.

# **SPECIFICATIONS**

Furnish and Install Internet Protocol Based CCTV Video Surveillance Camera Systems at Two (2) Residential Facilities for Harris County Juvenile Probation Department

# **SCOPE**

Harris County is accepting proposals from qualified vendors to furnish, deliver, FOB inside, and install turnkey Internet Protocol (IP) Based Closed Circuit Televisions (CCTVs) at two (2) locations for the Harris County Juvenile Probation Department (HCJPD).

Questions regarding this RFP, including clarification of the information or instructions contained herein must be submitted to Debbie Lasker via email at <a href="deborah.lasker@pur.hctx.net">deborah.lasker@pur.hctx.net</a> not later than Monday, January 5, 2015 at 2:00 p.m. Subsequently, a response to all questions received during this period will be issued as an addendum. **Responses from vendors not attending the Mandatory Pre-Proposal Conference will not be considered.** Vendors who are subcontractors to a prime vendor are not required to attend this meeting.

# MANDATORY PRE-PROPOSAL CONFERENCE AND SITE VISITS

A Mandatory Pre-Proposal Conference will be held on **Tuesday**, **December 16**, **2014 at 9:00 a.m.** at the Harris County Leadership Academy offices at 9120 Katy Hockley Road, Katy, Texas 77449; which is also the location of the first site visit. The second site visit will immediately follow at the Burnett-Bayland Rehabilitation Center located at 6500 Chimney Rock, Houston, Texas, 77081. Attendance is MANDATORY at both, two (2) locations, in order to have a better understanding of the requirements of this RFP and to be eligible to respond to the RFP. It is the responsibility of the vendor to conduct a thorough inspection of the facilities and verify that Harris County facilities and equipment are sufficient to enable vendor to provide services as requested, meeting or exceeding the RFP specifications.

Vendors must register for the Mandatory Pre-Proposal Conference and Site Visits by emailing <a href="mailto:deborah.lasker@pur.hctx.net">deborah.lasker@pur.hctx.net</a> and providing the names of attendees and company name before December 12, 2014. Persons with disabilities requiring special accommodations should contact Deborah Lasker at 713-755-5743 at least two (2) days prior to the pre-proposal conference.

# RENEWAL OPTIONS (MAINTENANCE AND SUPPORT ONLY)

Harris County may consider four (4) one year renewal options, renewable one year at a time, based upon the same terms, conditions and pricing as the original year. Renewal is subject to approval by Harris County Commissioners Court. Once renewal options are exhausted, the contract must be rebid. Harris County reserves the right to rebid at any time as is in its best interest and is not automatically bound to renew.

#### REQUIREMENTS

This project includes the installation of IP video surveillance cameras, Network Video Recorders (NVR) for media storage/retrieval, software, and the technological hardware for a functional system. Also, included in this project is user training and ongoing system support. The installation of Power over Ethernet (PoE) switches, Ethernet cabling, or conduit is not included in this project. The systems shall be installed at the following locations:

# Location No. 1: Burnett Bayland Rehabilitation Center, 6500 Chimney Rock Houston, Texas 77081

The Burnett Bayland Rehabilitation Center (BBRC) is a secure post-adjudication residential facility. The facility houses male juveniles between the ages of 10 and 17 that have been placed in the facility by Orders of a Juvenile Court to receive an assessment to determine needs and/or rehabilitation services.

The facility has capacity to house 144 juvenile residents. BBRC is a secure residential placement facility. Access to the building and movement within the building is strictly controlled and monitored. In addition to juvenile residents, the facility environment is comprised of administrative staff, juvenile supervision officers, teachers, and contract services providers. Structurally, the building has concrete floors and cinderblock walls.

The residential placement facility comprises three (3) buildings that serve the following functions and/or operational purposes:

- Multi-purpose activity rooms
- Medical Services operations areas
- Visitation areas and interview rooms
- Operation control/reception area
- Administrative offices
- Juvenile Probation Officer (JPO) office area
- Corridors
- Hallways
- Lobbies
- Classrooms
- School Auxiliary building
- Gymnasium
- Kitchen area
- Inventory area
- Dayrooms
- Sleeping areas

A total of 127 cameras shall be installed at BBRC. A schematic of the facility and a breakdown of the cameras by types and locations are provided in Attachment j.

# Location No. 2: Harris County Leadership Academy, 9120 Katy Hockley Rd. Katy, Texas 77493

The Harris County Leadership Academy (HCLA) is a secure post-adjudication residential facility. The facility houses male juveniles between the ages of 13 and 16 that have been placed in the facility by Orders of a Juvenile Court to receive residential rehabilitation services. It has capacity to house 96 residents. HCLA is a secure placement facility. Access to the building and within the building is strictly controlled and monitored. In addition to juvenile residents, the facility environment is comprised of administrative staff, juvenile supervision officers, teachers, and contract services providers. Structurally, the building has concrete floors and cinderblock walls.

The residential placement facility is a single structure building that serves the following functions and/or operational purposes:

- Multi-purpose activity rooms
- Medical Services operations areas
- Visitation areas and interview rooms
- Operation control/reception area
- Administrative offices
- Gymnasium
- Storage room
- Corridors
- Hallways
- Lobbies
- Classrooms
- Laundry room
- Kitchen area
- Inventory area
- Dayrooms
- Sleeping areas

A total of 119 cameras shall be installed at HCLA. A schematic of the facility and a breakdown of the cameras by types and locations are provided in Attachment j.

### SCOPE OF WORK

Vendor shall provide complete turnkey systems including all software, camera and site licensing, hardware, equipment, peripherals, programming, camera adapters, boxes, and, power, UPS, wire, carpentry, demolition, patching, refinishing and weatherproofing. The cost of all other trades necessary to install the complete system must be included, whether specifically mentioned or not. The project will entail the following primary work tasks:

- 1. Installation of IP video cameras.
- 2. Installation of proper junction boxes, back-boxes and camera adapters as need.
- 3. Installation and configuration of servers and NVRs for media storage/retrieval.
- 4. Installation of video view and management hardware.
- 5. Provide user training of the CCTV system upon completion of system installation.
- 6. Provide Harris County CCTV system documentation of system's operation, design and architecture.
- 7. Successfully deliver an efficient and reliable CCTV system to HCJPD.

Vendor will communicate and coordinate the various work tasks of this project with Harris County Juvenile Probation, Harris County Information Technology Center, and any other Harris County Departments that may have involvement/oversight responsibility for this CCTV system project. Additionally, vendor shall work cooperatively with other vendors that may be engaged to deliver related components of the CCTV system.

Specifications presented herein represent the Harris County vision for a type of video surveillance system that meets the needs of HCJPD. Vendors may propose options and innovations that meet, extend, improve or add relevant functionality to the technical and functional specifications in the RFP. Ultimately, the proposed video surveillance system submission must:

- 1. Meet Harris County's technical and functional requirements
- 2. Meet industry standards
- 3. Be sustainable
- 4. Be affordable
- 5. Be reliable

All work performed in the two (2) facilities shall be performed in a series of coordinated stages; in a building by building and/or area-by-area order so as not to breach facility security protocols, or disrupt operational processes and activities. The safety, security and confidentiality of the facilities juvenile residents must be maintained at 100% compliance with the facilities operational protocols.

Additional services shall include but not be limited to the following:

- 1. Installation of 127 fixed dome and specialized cameras of standard definition and megapixel cameras where specified. The cameras are to be installed in the BBRC primary building as well as the Gymnasium building, auxiliary school building and outdoor areas located in the BBRC Facility area. (Attachment j of this document provides a breakdown of the camera count by building and area.)
- 2. Installation of 119 fixed dome and specialized cameras of standard definition and megapixel cameras where specified. The cameras are to be installed in the HCLA primary building as well as designated exterior areas. (Attachment j of this document provides a breakdown of the camera count within the building and exterior areas.)
- 3. Installation and configuration of video review client software and hardware on selected BBRC and HCLA workstations on both administrative and standard view only workstations.
- 4. Installation and configuration of ViconNet Web Service software.
- 5. Vendor shall be responsible for providing, installing, configuration, troubleshooting, training and warranty service of all security systems devices, terminal equipment, control and display equipment for a completely operational system.
- 7. Vendor shall install and configure Vicon servers and NVRs with storage. Vendor will not be responsible for the backbone fiber, PoE switches, Ethernet nor conduit to cameras or workstations from / to PoE switches.

8. Vendor shall bear all liability and penalties for damages arising from failure to submit equipment that meets the technical specifications of this RFP.

# **VENDOR REQUIREMENTS**

- 1. Vendor shall coordinate the setup and installation of the assigned scope of work associated with this project.
- 2. Vendor shall ensure the installation is in compliance with all applicable professional and regulatory trade codes and standards including those of Harris County and HCJPD.
- 3. Vendor shall be responsible for all Permits and Licenses required from the City of Houston and any other regulatory agencies. Vendor is fully responsible for compliance with these requirements.
- 4. Vendor must have the necessary licenses and/or registration required by regulatory authorities that qualify vendor to perform the work specified in this project.
- 5. Vendor shall be required, before the award, to demonstrate to the HCJPD team that it has the necessary facilities, ability, experience, and financial resources to provide the services specified in this bid in a satisfactory manner.
- 6. Vendor shall be required to work around and/or accommodate on-going operations without disrupting services, utilities or procedures.
- 7. All vendor personnel should have documented training to meet and exceed the OSHA requirements in safety.
- 8. All vendor personnel shall possess the appropriate skills, experience, and competence and if applicable, any required certification or license issued by City of Houston/State of Texas specific to the work they will perform.
- 9. Vendor shall develop a turn-key quotation with detailed breakdown of materials and labor to complete the work to cover all aspects of the work to be performed on this project.
- 10. Vendor shall not use contracted personnel on this project.
- 11. Vendor shall conduct operational demonstration and/or equipment in-service at appropriate milestones to ensure delivery of specified functionality.
- 12. Vendor shall submit full details on all mounting brackets and equipment, as it must fit within the current room design aesthetics.
- 13. Vendor shall follow Harris County project planning, scheduling and change control processes as applicable to this project.

# SECURITY ELECTRONIC EXPECTATIONS

### Summary of Work

- 1. Vendor shall provide and install 120VAC hookups to head-end equipment including UPS and emergency power hookups for camera network.
- 2. All other work (wire, wire installation, terminations and mounting) shall be performed by the systems vendors' own employees. Vendors that cannot provide complete turn-key solutions with their own in-house staff will not be considered for award. This requirement will give Harris County a "Single Source Responsibility" format.
- 3. Vendor shall provide all junction boxes, back-boxes, camera mounts and/or adaptors required for proper connectivity/ installation. All work performed shall be performed in a series of stages area by area or building by building in order not to disrupt daily business or institution activities.

# **Vendor Qualifications**

- 1. Vendor shall have installation, renovation and replacement experience of occupied detention facilities.
- 2. Vendor shall provide copies of the company license number issued by the state, which signifies they are approved to do security work in the state.
- 3. Vendor shall provide experience installing and configuring Vicon Security devices and proof of Vicon certifications.
- 4. Vendor shall provide a list of five (5) references for similar projects that they have completed. The five projects should be similar in size, scope, and price to this project. If subcontractors were used by the submitting Systems Vendor, then that project shall not be used or included in the list, as this project is requiring a "Single Source Responsibility" format requiring complete installation by full time employed employees of the submitting Systems Vendor. Harris County will review each project submitted and disallow any project not meeting the above requirements. If the total approved projects do not meet the minimum five required, Harris County will not approve the submitting systems vendor.
- 5. For each project listed provide:
  - a. Vicon security devices used in each project.
  - b. Values of the subsystems and total contract price.
  - c. Technically describe the security components integration with each other.
  - d. Provide Contact Person Name and Phone Number at each submitted project site that can confirm that the systems vendor performed the installation in an acceptable manner.
  - e. List the names and roles of employees on the submitted projects.
- 6. The names, up to date phone numbers and System Engineer of all Jail/Detention/Corrections projects installed by the submitting systems vendor, within the last 5 years.
- 7. Company's history providing secure facility or detention security systems.
- 8. Organizational chart with the resumes of individuals.
- 9. Provide a narrative description of all software to be utilized, network types. Any custom software that is to be developed by the vendor needs to be described in detail.
- 10. A letter from the Surety Company reflecting the Surety Company's history and experience with vendor providing the Security Electronics and the current bonding limit. Vendors who do not meet these specifications, fail to turn in a valid prequalification, or do not have an acceptable reputation of good service will not be allowed to bid.

### **Submittals**

Vendor shall submit the following in accordance with conditions of Security Electronic Expectations:

- 1. Product data for each type of product specified.
- 2. Submittal package detailing the Security Electronics system including but not limited to the following:
  - a. Power circuits on 36" x 24" D-Size drawings.
  - b. System riser diagram on 36" x 24" D-Size drawings including all interconnecting wiring, sizing and color codes. Include manufacturers wire type where required.
- 3. Wiring diagrams, detailing wiring for power, signal and control, differentiating clearly between manufacturers installed wiring and field installed wiring. Identify terminals to facilitate installation, operation, and maintenance.

- 4. Submit a power system design spreadsheet of power loading for all DC power supply circuits, AC UPS circuits, and AC normal power circuits required by the security system on 36" x 24" D-Size drawings. The spreadsheet shall consist of each circuit/device controlled by the security system with each device's steady state and in-rush load, and a loading summary of all device types for each circuit.
- 5. Any substitutions for specified equipment must be pre-approved by the Project Manager at least ten (10) working days prior to bid date. Provide complete product data, diagrams and block diagrams for substitution. ANY SUBSTITUTIONS THAT WERE NOT PRE-APPROVED will be denied after the bid.
- 6. Provide complete manual material concurrently with the system submittal and provide updated final version of manuals one month before completion of construction and final system turnover.
- 7. Provide proof of license for all software provided on project.

# Delivery, Storage, and Handling

Protect all materials and equipment from damage during storage at the site and throughout the construction period. Protect equipment and materials during shipment and storage against physical damage, dirt, dust, moisture, heat, cold, rain, and any foreign substances that may damage the equipment. Prevent damage from rain, dirt, sun and ground water by storing the equipment on elevated supports and covering them on all sides with securely fastened protective rigid or flexible waterproof coverings.

## Installation

- 1. General: Install system in accordance with National Electric Code (NEC), Near Field Communicators (NFC), International Building Code (IBC), Americans with Disabilities (ADA), Underwriter Laboratories (UL), National Fire and Protection Association (NFPA) 70 and other applicable codes. Install equipment in accordance with manufacturer's written instructions.
- 2. Wiring Methods: Install wiring in raceway except consoles, desks, and counters.
- 3. Control Circuit Wiring: Install control circuits in accordance with NFPA 70 and as indicated. Provide number of conductors as recommended by system manufacturer to provide control functions indicated or specified.
- 4. Splices, Taps, and Terminations: Make splices, taps and terminations on terminal strips in junction, pull, and outlet boxes, terminal cabinets and equipment enclosures.
- 5. Identification of Conductors and Cables: Use color coding of conductors or apply wire and cable marking tape to designate wires and cables so all media are identified in coordination with system wiring diagrams.
- 6. Weatherproofing: Provide weatherproof enclosures for items to be mounted outdoors or exposed to weather.
- 7. Repairs: Wherever walls, ceilings, floors, or other building finishes are cut for installation, repair, restore, and refinish to original appearance.

# Grounding

Provide equipment grounding connections for interconnections systems as indicated. Tighten connections to comply with tightening torques specified in UL Standard 486A to assure permanent and effective grounds.

# Field Quality Control

- 1. Vendor pre-testing: Upon completing installation of the system, align, adjust, and balance the system and perform complete 100% pre-testing of all devices. Determine, through pre-testing, the conformance of the system to the requirements of Drawings and Specifications. Correct deficiencies observed in pre-testing. Replace malfunctioning or damaged items with new and retest until satisfactory performance and conditions are achieved.
- 2. Vendor System Validation: Upon completion of Pre-testing, notify Harris County a minimum of ten (10) days in advance, of acceptance test performance schedule and conduct tests of all devices in the presence of the Project Manager. Provide a complete step by step written record of test results which shall be turned over to Harris County along with the As-built documentation. This process shall be known as the "System Validation".
- 3. Vendor Operational Test: Perform an operational system test to verify conformance of system to these specifications.
- 4. Vendor Inspection: Make observations to verify that units and controls are properly labeled and interconnecting wires and terminals are identified.
- 5. Vendor Retesting Re-certify deficiencies indicated by tests and completely retest work affected by such deficiencies at vendor's expense. Verify by the system test that the total system meets the Specifications and complies with applicable standards.
- 6. Manufacturer's Field Services: Vendor shall provide services of a Vicon factory authorized service representative to inspect the field assembly and connection of components and the pretesting, testing, adjustment of the system and commissioning of CCTV system.

# Quality Assurance

- 1. Installer Qualifications: Engage an experienced installer who is a Vicon factory authorized and certified service representative to perform the work in this section.
- 2. Electrical Component Standard: Components and installation shall comply with NFPA 70, "National Electric Code."
- 3. Electronics Industries Association (EIA) Compliance: Comply with the Electronics Industries Association standards.
- 4. Compliance with Local Requirements: Comply with the applicable building code, state and local ordinances, and regulations and the requirements of the authority having jurisdiction.

# **PRODUCTS**

### Products-General

- 1. Acceptable manufacturers See individual sections below:
- 2. NFPA Compliance: Provide systems conforming to the requirements of the NFPA 101, "Life Safety."
- 3. UL Listing and Labeling: Provide components specified in the individual sections that are listed and labeled by UL/UR.
- 4. Nationally Recognized Testing Laboratory Listing and Labeling (NRTL): Provide system and components specified that are listed and labeled by an NRTL. The term "NRTL" shall be defined in OSHA Regulation 1910.7.
- 5. Single Source Responsibility: Obtain components from a single source vendor who assumes responsibility for compatibility for system components furnished and provides complete turn-key installation to maintain the Single Source Responsibility format.

# **Product Models**

If any product model numbers in this specification become obsolete, go out of production, or are unobtainable then the latest and greatest model from that manufacturer should be purchased at no extra expense to Harris County.

# **Transient Surge Protection**

Transient surge protection is required for all systems/sections of the Security Electronics Division.

- 1. All Transient Surge Protection (TSP) devices installed shall utilize Silicon Avalanche Diodes (SAD) as the primary means of protection. Secondary protection shall be SAD or MOVs. Each protection circuit shall be independent of each other and neither circuit shall short to ground on clamping transient surges.
- 2. Each 120VAC circuit or feeder shall be provided with a TSP device.
- 3. Each metallic conductor(s) entering or leaving the building shall be provided with a TSP device.
- 4. Each TSP device shall be provided with a ground connection.
- 5. Alarm contacts on each TSP device shall be wired as inputs to the security system to annunciate as trouble alarms.

# Extra Materials

Deliver products as identified in the individual sections under (PRODUCTS) in factory containers. Materials are to be stored in a clean dry space, in original containers. Protect products from fumes and construction traffic.

### **EXECUTION**

### System Validation

- 1. Train Harris County's maintenance personnel in the procedures and schedules involved in operating, programming, troubleshooting, servicing, and preventative maintenance of the system. Provide a minimum of forty (40) hours training on site which should include sixteen (16) hours for maintenance, sixteen (16) hours for general user and eight (8) hours for administration use.
- 2. Schedule training with Harris County through Harris County with at least seven (7) days advance notice.
- 3. Video record all training sessions. Have sessions professionally edited with chapters, menus and sub categories. Provide two (2) DVD's to Harris County of the finished sessions.
- 4. Occupancy Adjustments: When requested by Harris County within one year of date of Substantial Completion, provide on-site assistance in adjusting levels, resetting matching transformer taps, and adjusting controls to suit actual occupied conditions. Provide up to two visits to the site for this purpose.

# Cleaning and Protection

Prior to final acceptance, clean all system components and protect from damage and deterioration.

# As-Built Documentation

- 1. At the end of the project, provide Harris County with six (6) sets of D-size "as-built" systems drawings for every system in the Security Electronics Division. Drawings in Drawing Exchange Format (DXF) format should also be delivered on 2 DVD disks which shall be marked clearly with project name, system, and company information.
- 2. After award supplied information shall be submitted under Division 1, a complete system description including number and manufacturer of all equipment required for a complete Security Electronics system as described in the specifications. Include all Harris County supplied equipment, wire, and cables pertaining to or interfacing to this system.

# Warranty/Maintenance Service

- 1. Warranty/Maintenance Service Contract: Provide maintenance and warranty of systems and equipment for a period of 36 months commencing with Substantial Completion, using factory-authorized service representatives.
- 2. Warranty/Basic Services: Systematic, routine maintenance visits on an annual basis at a time/date coordinated with Harris County. In addition, respond to warranty service calls within 24 hours of notification of system trouble. Adjust and replace defective parts and components with original manufacturer's replacement parts, components, and supplies.
- 3. Additional Services: Perform services within the above 36 month period not classified as routine maintenance or as warranty work as described in "Warranties and Bonds" when authorized in writing. Compensation for additional services must be agreed upon in writing prior to performing services.
- 4. Renewal of Maintenance Service Contract: No later than 60 days prior to the expiration of the maintenance services contract, deliver to Harris County a proposal to provide contract maintenance and repair services for an additional one-year term. Harris County will be under no obligation to accept maintenance service proposal.
  - a. The warranty shall exclude Acts of God, lighting strikes (as long as grounding and surge protection specifications were adhered to), officer abuse or any unnatural abuse Harris County.
  - b. Software upgrades or enchantments necessary for functionality and security both out of box software and custom solutions are to be performed when necessary at no cost to Harris County throughout warranty period.

# **CCTV SYSTEM SPECIFICATIONS**

# Summary of Work

- 1. Vendor shall provide a complete and fully operational IP based CCTV system. All equipment and materials used shall be standard components, regularly manufactured, regularly utilized in the manufacturer's system.
- 2. All indoor cameras shall be IP based powered by PoE. External cameras shall be IP based or analog with environmental housings as specified.
- 3. IP CCTV system will be completely interfaced with the network, NVRs, video storage, servers and workstations for camera callup on monitor via client software/hardware.

### <u>SPECIFICATIONS (CONTINUED)</u>

- 4. The video system shall provide Harris County with remote visibility into and out of the facility. Along with this, the system shall also record camera images to provide a track record of past video of inside the building.
- 5. All work performed in all Sections shall be performed in a series of stages building by building or area by area in order not to disrupt daily business or institution activities.

# **PRODUCTS**

# Video Management Software - General

- 1. The Video Management Software (VMS) shall meet the requirements of business and government surveillance applications. The software shall be unique and power a series of Network Video Recorders, IP Cameras and Workstations. The software shall provide a complete and comprehensive application for the operation and maintenance of a video surveillance system. It shall provide full live digital video surveillance over a standard 100/1000Base-T network by the use of a graphical user interface (GUI) incorporating video display areas, toolbars, control palettes, and interactive site map displaying system components.
- 2. The software shall be available in two versions. One version shall provide full functionality except for recording capability. The second version shall have full functionality plus recording capability. Both versions of the software shall also be available as software package for specified workstations.
- 3. The software shall offer network connectivity to other family components and share all video and control data over the network using standard network protocol. The number of network-connected components shall only be limited by the number of assigned IP addresses.
- 4. The software shall provide an open platform that allows integration with Open Network Video Interface Forum (ONVIF) compliant commercial off-the-shelf (COTS) devices, such as: IP cameras, and IP edge devices, including standard resolution and megapixel cameras, from numerous industry-leading manufacturers. It shall support Unicast or Multicast according to the edge device capability.
- 5. The software shall run on a COTS workstation with a minimum of 2.66 GHZ dual-core processor, 2 GB of RAM and 5 GB of disk space. The software shall run on the Microsoft Windows 7 Professional 32 or 64-bit operating system.
- 6. The software, without any degradation to video quality, shall simultaneously offer:
  - a. 16-channel continuous video playback.
  - b. 16-channel video playback transmission to the network.
  - c. 16-channel continuous video receiving from the network.
  - d. Recording of up to 95 cameras on a single NVR, depending on resolution, quality and frames per second (FPS) settings.
  - e. User selectable video archiving of pre-existing recordings.
  - f. Video export in AVI, MPEG-4 or Xvid and viewable on a standard DVD and media player.
  - g. Video archives in a verified, secure CD or DVD format.
  - h. Support for the GUI to display on a widescreen monitor (16:9/16:10).
- 7. The software shall offer features including the simultaneous display, playback, distribution and archive of multiple channels of video. Cameras shall be the primary input devices. Each channel of video shall have the capability of being displayed, played back, distributed and archived simultaneously across several servers and clients across the network. The software shall allow recording (version dependent) and viewing at different frame rates (FPS).

- 8. A web-based interface shall be provided to access the VMS from any standard web browser enabled device. It shall provide live viewing, playback controls. The software shall allow control of a Network Video Recorder (NVR) using an administrative networked workstation with administrative authorization to shall have the ability to start or stop video, play back video, adjust all aspects of camera, and recording functionality.
- 9. The software shall support playback from the main screen without losing live video viewing in the following formats:
  - a. Quick playback by using a right mouse-click, the user will be able to select and launch playback for a specific camera in a pre-defined number of seconds before the live image. The playback window will open adjacent to the live one.
  - b. Playback from time shall allow setting the playback to start from a specific date, time and database on the network. This shall allow playing back the same camera several times.
- 10. The software shall be provided on CD format in a suitable case.
- 11. The users shall have the ability to generate Events History Reports which shall contain all information related to an event. The user shall have the option to display the reports in either a list or thumbnail view. The reports shall contain camera and site names and event dates and times. Selecting an event in either view will enable user to play back video for the event. Controls shall be provided to specify whether playback should begin when the event occurred or up to 30 minutes prior to the event occurring. The user shall have option to add notes about the event to the database and to save a snapshot (jpg) of the event for reference purposes. The system shall also display information regarding edits, if any were made to the video.
- 12. Acceptable Manufacturers Vicon IP system based on the latest ViconNet 6.x with VN-NVR-51TBV6-R6 (preloaded NVR internal software configured for raid 6).

# Video Management Software - Setup, Configuration and Security

- 1. The software shall offer a full multi-user authorization login application. This application shall offer levels of authorization based on defined sites and functions. In addition, a full setup utility shall be available for the Administrator to configure authorizations. A user shall be able to log in by default, as an Administrator or Guest. Guest authorization shall be configurable for specific system operations. Authorization rights setup shall be performed using the Site Authorization screen. Group rights shall be available to configure by specific site. Rights shall provide authority to perform all system functions. The software shall offer a full multi-user authorization process as follows:
  - a. User groups shall be created once globally and shall function in all components connected to the network.
  - b. Users shall be created once globally and shall be given rights to particular groups.
  - c. Groups shall be authorized and given specific access to each unit, permitting "function-specific" profiles.
  - d. Users created and authorized for each unit shall be able to log in to any recorder and workstation and automatically have their group rights for that machine follow them.
  - e. There shall be no virtual limit on the number of groups and users that can be authorized in the software on NVRs.
  - f. The number of groups and users authorized on the IP cameras and encoders/decoders will be limited to 20 groups and 100 users.

- g. The software shall allow for each group to be authorized or denied access, per component, to: Login, Logout, Site List, Setup, Network Setup & Site Name, User and Group Management, Site Authorization, Auto Login, Macro Create-Edit, Alarm Setup, Authentication Settings, Camera, and Device Setup, Pre & Post Alarm, Storage Database Utilities, Auto Record, Exit to OS, RS-232/422/485 Setup, Picture Quality and Resolution Setup, Registration, Manual Record and Playback Setup, Central Failure Notification, Recording Verification, Auto/Manual FPS Setup, Texting and Email, Display Settings, Remote cameras and alarm names, Data storage allocation, Low Bandwidth, Language Translation Utility (LTU) Setup, Map Sets, Reset Nucleus, Backup and Restore, Settings Summary, Scheduler for Macros, Camera Grouping, I-Onyx and Third Party Cameras,
- h. Third Party Format, Video Analytics Engine, Scheduling, display and alarm notification, Remote pre/post alarm recording, Backup utility for setup configuration, Reports.
- 2. All users created shall be able to log in to any workstation on the system. A user, given appropriate access, shall be able to remotely configure all components connected to the network. The programming shall include the complete operation of the recorders, including but not limited to: Network Settings and Site Name, Site Authorization, Auto Login, Storage Database, Registration, Macro Editor, Schedule for Macros, Alarms, Manual Record and Quality Buttons on Screen, Recording Verification, Authentication, Map Sets, Language Translation Utility (LTU).
- 3. The software shall permit viewing of live video from any camera connected to any recorder on the network.
- 4. The software shall allow for duplicate recording over the network (version dependent).
- 5. The software shall provide the ability to save any event that was tagged as an alarm (video motion detection, video loss or input received from the EVM system to be saved to a separate database, where it cannot be overwritten. The feature shall be named Video Vault.
- 6. An Archive Wizard shall be provided that simplifies the process of creating archives and saving video to removable media, such as: CD, DVDs or solid-state drives. An embedded player shall be packaged with each archived video clip for playback on any machine.
- 7. The software shall provide an advanced method for creating and executing extensive software commands. This shall be achieved by the use of macros. Macro configuration shall be defined for recorded cameras, command duration, recording location (version dependent), local viewing, device ID, picture quality, refresh mode, recording rate (FPS) (version dependent), related devices (sensors) and alarm activation.
- 8. Macros shall allow an authorized user to create and schedule software commands that shall include but not be limited to:
  - a. Sequencing cameras, including multi-screen displays, in a local and remote recorder.
  - b. Execute remote macros existing on recorders currently connected to the network.
  - c. Record cameras at different qualities and frame rates from any recorder on the network (version dependent).
  - d. Send alarm condition to any recorder and workstation on the network. By the use of macros, an authorized user shall be able to program the destination component of the alarm condition.
  - e. Run applications or batch files, such as: open a word processor, spreadsheet program, calculator, media player or start a batch program to run additional tasks.
  - f. Run an audio file on alarm; for example, audible instructions.

- g. Send an email, text message, start video or any other task that can be initiated by a batch file in response to a Central Failure Notification (CFN) or Recording System Verification (RVS) notification.
- h. An authorized user shall be able to program and execute macros remotely without the need to be physically located at the recorder that the macros will be programmed on.
- i. The Schedule/Macro button shall allow the running of preconfigured combinations of camera and sensor routines.
- j. Macro scheduling shall include but is not limited to:
  - i. Days of the week when a macro is active.
  - ii. Start and end time for when a macro is active.
  - iii. If a macro is to run continuously or not.
  - iv. A macro shall be able to run every:
  - v. 5 min, 10 min, 1/4 hour, 1/2 hour, 3/4 hour, 1 hour, 2 hours, 3 hours, 4 hours, 6 hours, 8 hours, 12 hours.
  - vi. A macro shall be able to be scheduled to run for 1-256 cycles.
- 9. The network and sites configuration shall allow:
  - a. Set up of a System Nucleus and Backup Nucleus. The Backup Nucleus shall maintain an updated backup of all System Nucleus settings for recovery in case of failure. The system shall provide failover and redundancy and be fully operational in the event of a System Nucleus failure. Each device shall have an updated backup table to allow operation should the System Nucleus fail. A Network Settings menu shall provide a comprehensive worksheet for each networked device. When all units have been set up, the resulting connected devices shall define the site.
  - b. Site Authorization: Workstation shall be set up using remote recorder or workstation GUI. Site name and authorization shall be established by User and Group. Permissions shall be assigned for all system functions.
  - c. Time synchronization of all components on the network.
  - d. All appropriate networking features including each server IP, Subnet and Gateway.
- 10. Device configuration shall have the ability to be configured for system recognition and operation. Valid devices shall be:
  - a. Cameras
  - b. Sensors
  - c. Relays
- 11. All devices shall be assigned a unique ID number and title descriptor.
- 12. There shall be a Recording Verification System used to identify and log any recording errors encountered during normal system operation. The log shall be manually reviewed for possible video segment errors earmarked with a Recording Site, Device Name, Date/Time, Verified Site, Macro Name and Error Description stamp. There shall be a Central Failure Notification (CFN) System used to identify all possible site errors. The CFN shall be accessible from only the Nucleus unit. The log shall be in a time/date order and be manually reviewed for errors.
- 13. There shall be a Site Map feature. It shall allow the installation and configuration of a custom screen map used to identify and access site-installed components (cameras). The map should include text boxes and sub-maps that further define the layout. This utility shall provide full installation, configuration and editing of maps. Maps should have the ability to be moveable anywhere on the screen.

- 14. There shall be a Language Translation Utility (LTU). It shall allow a manual translation of the entire GUI into any language that uses varying alpha-numeric character sets. The utility shall also store files to enable changing from one language to another.
- 15. The system shall provide alarm notification via e-mail, text messaging, and work station text. Macros shall be created to view and record video at preset positions, trigger alarms over the network and send email or text message for alarms or on schedule.
- 16. Storage Database Utilities shall allow setup and usage of detected hard disks locally. Any networked recorder, workstation or server shall be a candidate to add to the picture database. Once established, any recorder shall use established hard disks for recording data.
- 17. Alarm Setup: Recorder alarms shall be established by adding detectors and configuring motion detection on video. The triggering of the recorder's detectors shall be used to send alarms to remote units and generate email or text messages. In addition, detectors shall be able to be edited and deleted.
- 18. Authentication: The video from the recorder's cameras shall be enabled to verify the authentication of the video and present an authentication symbol on the displayed video for both live and recorded playback.

# Video Management Software - User Interface

- 1. The software installed in both recorders and workstations shall be similar in:
  - a. Graphical User Interface, therefore an operator shall need to learn only one interface for both control and programming of the system.
  - b. Functions, offering the ability to remotely configure most system components from any recorder or workstation.
  - c. The application shall display a Main Window and Login Window, where all configuration and operation shall be accomplished.
  - d. The login window shall consist of a User Name and Password field.
  - e. The user interface shall serve both operators and system administrators. For the operator, the controls shall be laid out in a familiar VCR type control array, with Playback, Stop, fast forward, still, slow motion, etc. right under the viewing panes. The workspace area shall enable the operator to select the number of panes to display, view system activity, select quality levels and perform many other functions without having to drill down through menus or search for these commonly used functions. The interface shall also react to user interaction. The system administrator shall easily access functions such as scheduling macros and producing reports from the toolbar at the top of the Main Window. The Setup button on the toolbar shall provide access to the System Settings menu. The System Settings menu shall provide access to all of the features of the software.
- 2. The Main Window shall provide the following:
  - a. The Site and Device List depicting all recorders, servers and workstations connected to the network.
  - b. Within the Site and Device List, each unit shall be depicted with all connected devices such as:
    - (1) Cameras connected.

- c. A multi-screen display area that allows for screen displays of:
  - Single Camera
  - Quad
  - 3 x 3
  - 4 x 4
  - 6-way
- d. Full screen of any of the above selected multi-screens shall allow for the viewing of the particular multi-screen in full screen mode by hiding the graphical user interface.
- e. Access to all available programming menus.
- f. On-demand recording of video currently viewed shall allow for the recording of any camera from any recorder connected to the network.
- 3. The Site and Device List shall provide a physical list of all known network site areas and connected cameras. The cameras shall be represented by graphical symbols. The user shall also have the option of showing the cameras and devices by logical camera grouping instead of the Site List. Components in the Site and Device List shall be selectable and configurable.
- 4. Viewing of live cameras shall be performed by:
  - a. Clicking on the desired camera in the Site and Device List.
  - b. "Drag-and-Drop" operation of cameras from the Site and Device List to the appropriate multi-screen space.
  - c. "Drag-and-Drop" operation of the recorder from the Site and Device List to the appropriate multi-screen space.
  - d. "Drag and Drop" operations from a camera group list to the appropriate multi-screen space.
  - e. "Drag and Drop" operations from a graphical map to the appropriate multi-screen space.
- 5. The Navigator Window shall graphically display recorded video. It shall contain all function buttons necessary to access the video on-screen. These functions include but are not limited to:
  - a. A scalable timeline shall be available to define "from" and "to" time/date intervals of video.
  - b. Cameras shall be selected from the Navigator List and displayed in the timeline in different colors for video.
  - c. The display mode shall be selected from a palette to configure the number of cameras played back.
  - d. An "Export Video" button shall be used to create a video clip in the following formats: AVI, MPEG, Xvid of the selected single camera video segment.
  - e. A "Search" button shall be available to search selected video segments for "Area of Interest" (AOI) events using a scalable sensitivity setting.
  - f. Play button shall be available to display the Main Window with the Video Display Area containing the selected video segments ready for review.
  - g. Video retrieval in the Navigator Window shall be performed by:
  - h. Selecting the Display Mode for required number of cameras.
  - i. Selecting the device (recorder or workstation) where video was previously stored or archived.
  - j. Selecting the cameras to be played back.
  - k. By "Drag-and-Drop," similar to the live view, selected cameras are inserted into the multiscreen displays so that an operator can view a mix of previously recorded cameras and live video on the same screen.

- 1. The timeline shall provide a graphical interface depicting color-coded bars that indicate video previously recorded as well as all alarmed video.
- m. Video indicator bar shall indicate recording with no sensed motion.
- n. Any recorders on the network shall be capable of playing back, by utilizing the multi-screen displays, a mix of videos previously recorded on any other server on the network, or archived.
- o. The Navigator Window shall offer the ability to playback cameras:
  - (1) One by one.
  - (2) Time synchronized (precise timeline when the cameras were recorded).
  - (3) By double-clicking any alarm report line or alarm window.
- 6. Access to programming and more advanced screens shall be done by means of an immobile, permanently docked toolbar located on the top live screen. The toolbar shall provide access to the following major functionality of the system:
  - a. The Scheduler/Macro.
  - b. Reports.
  - c. Setup.
  - d. Logout and Shutdown buttons.
- 7. The operator shall have the ability to launch web pages or any other type of web-based information such as embedded HTML or PDF documents from within the user interface. Along with informational websites such as, internal operating procedures such as operation during emergencies, lockdowns, severe weather, etc. shall be launched and controlled from the VMS system and have pass code protected authorization.
- 8. Authentication shall be configured using the Authentication Settings screen. Authentication display shall be configured by site and affect the destination video. A check box shall be available to enable video authentication and view the status of the video generated. The video authentication scheme shall utilize a 128 bit MD5 algorithm.

# Video Management Software - Video Quality

- 1. The IP cameras shall employ a compression algorithm based on:
  - a. Optimized MPEG-4, JPEG (Normal and Full) and H.264. The software running on the NVRs shall support the algorithms used by the devices.
  - b. User selectable levels of resolution (quality) depending on camera not requiring a need to restart the application. It shall be selectable using a 4-position bar from the main screen. There shall be 4 levels of resolution (4 CIF, 2 CIF, CIF, and HCIF) with 2 levels of compression comprising 8 quality levels total, which shall be accessible from the Setup menu selections.
- 2. User selectable resolution shall include capture sizes (camera dependent) of:
  - a. 360 x 122 pixels, 432 x 146, PAL.
  - b. 360 x 244 pixels, 432 x 293, PAL.
  - c. 720 x 244 pixels, 864 x 293, PAL.
  - d. 720 x 488 pixels, 864 x 586, PAL.
  - e. 1280 x 720 pixels (0.9 MP)

- f. 1280 x 1024 pixels (1.3 MP)
- g. 1600 x 1200 pixels (2.0 MP)
- h. 1920 x 1080 pixels (2.1 MP)
- i. 2048 x 1536 pixels (3.1 MP)

# Fixed Indoor/Outdoor Dome Vandal Proof Color Camera

Provide quantities and types as shown on plans and as applicable to the mounting location.

- 1. The indoor/outdoor fixed camera dome shall incorporate a fixed camera/lens combination. The camera dome shall be available for indoor/outdoor surface mounting. The high-resolution day/night camera shall be available with an integral 3-9 mm varifocal autoiris lens. The lens shall be available motorized to allow for remote configuration of zoom and focus (motorized focus and zoom). Day/night operation shall be achieved using a built-in IR-cut filter. A model with IR illuminators shall be available; IR distance shall be 65 ft (20 m) with 24 IR LEDs. A clear polycarbonate lower dome that is secured by tamperproof screws shall be included.
- 2. The camera position shall have a three-direction adjustment, allowing for adjustment of pan, tilt and lens rotation (roll), for any angle of view required.
- 3. The camera dome shall be powered by PoE, 24 VAC with heater. The camera dome shall have dual/triple streaming video and support H.264, MPEG-4 and M-JPEG (2nd stream only) compression. The camera shall be available in 3 maximum resolutions, SD (D1, 0.3 megapixel), 720p (1.3 megapixel) and 1080p (2 megapixel).
- 4. Camera features shall include electronic iris, AGC, BLC, white balance, flip, mirror and motion detection.
- 5. The camera dome shall meet the FCC requirements for a Class A device. It shall include support for the industry-standard ONVIF interface. It shall be IP66-rated to withstand rain, dust and vandalism and IK10 rated for impact resistance.
- 6. The miniature fixed-position camera dome shall meet or exceed the following design and performance specifications.

# DAY/NIGHT IP CAMERA DOME SPECIFICATIONS

- 1. Imaging Device: 1/2.8-inch progressive scan RGB CMOS
- 2. Max. Resolution: SD (D1), 720p and 1080p models
- 3. Shutter Speed: 1/4 1/20,000 sec
- 4. Automatic Gain Control: On/Off selectable
- 5. Sensitivity: Color:0.08 fc (0.8 lux); B&W: 0.02 fc; (0.2 lux); DSS: 0.001 fc; (0.01 lux); IR Color: 0.02 fc (0.2 lux) @f/1.2, 50 IRE
- 6. Tilt and Horizontal 3-axis adjustment: pan (355°), tilt (70°) and roll (lens Adjustment:may be rotated on its axis 355°)
- 7. Electronic Zoom:  $1 \sim 10X$  (client software)
- 8. Lens Adjustment: Focus and zoom adjustment; fixed lens, DC iris motorized lens, iris automatically adjusts to zoom condition
- 9. Focal Length: 3-9 mm varifocal
- 10. Horizontal Field of View: 3-9 mm: 93°-31.7°
- 11. IR Distance 65 ft (20 m) with 24 IR LEDs (IR models only)

# **ELECTRICAL SPECIFICATIONS**

- 1. Input Voltage: 24 VAC, 12 VDC or PoE
- 2. Current (No IR/IR): PoE: 70mA/130 mA:
  - a. 12 VDC: 250 mA/470 mA;
  - b. 24 VAC: 300/520 mA
  - c. Heater: 0.6A (24 VAC only)
- 3. Power Consumption
  - a. (No IR/IR): PoE: 3.5 W/6.4 W;
  - b. 12 VDC: 3 W/4 W;
  - c. 24 VAC: 3.3 W/6.5 W
  - d. Heater: 20 W (24 VAC only)
- 4. Connectors: Power: 24 VAC/12 VDC screw terminal or PoE RJ-45
  - a. Video/Data: RJ-45
  - b. Alarm: screw terminal
  - c. Audio: jack
  - d. Slot for SD card
  - e. Composite output for installation
- 5. Radio Frequency
  - a. Emission Rating: FCC Class A; CE

# **ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature: -40° to 122°F (-40° to 50°C) with heater Humidity: <95% relative, non-condensing

# PHYSICAL SPECIFICATIONS

- 1. Construction: Diecast aluminum
  - a. Dome: clear polycarbonate; tamperproof screws
- 2. Dimensions: Height: 5.0 in. (127.4 mm),
  - b. Diameter: 6.06 in. (154 mm)
  - c. Dome Diameter: 4.3 in. (109.97 mm)
- 3. Weight: Approximately 2.5 lb (1.1 kg)

# **MECHANICAL SPECIFICATIONS**

- 1. Camera Mount: Surface mount
- 2. Adjustments: 3 axis adjustment, pan (355°), tilt (70°) and roll/azimuth (355°)

# **NETWORK VIDEO SPECIFICATIONS**

- 1. Communication Platform: Open platform; compatible with ViconNet Digital Video Management System
- 2. Compression: H.264; MPEG-4; M-JPEG available on 2nd stream
- 3. LAN Interface: 10 Base-T/100 Base-TX, Unicast/Multicast
- 4. Video Channels Dual/triple streaming
- 5. Resolution and Frame Rate: SD: 704x480/576, 352x240/288, 640x480, 320x240;720p: 1280x720, 704x480/576, 352x240/288, 640x480, 320x240; 1080p: 1920x1080, 1280x720, 704x480/576, 352x240/288, 640x480, 320x240
  - a. 2.5 FPS ~ 30 FPS (2.1 FPS ~ 25 FPS PAL)

- 6. Web Browser: Internet Explorer, Firefox, Chrome, Opera
- 7. Users: Live viewing for up to 10 clients
- 8. Image Settings: Adjustable bit rate; flip and mirror; configurable
  - a. brightness, contrast, hue, sharpness; white
  - b. balance, AGC; Electronic Shutter; automatic or manual;
  - c. BLC; digital zoom; motion detection;
  - d. zoom and focus (motorized lens models)
- 9. Supported Protocols: IPv4/IPv6, TCP/IP, HTTP, HTTPS RTSP, RTCP, RTP
  - a. SMTP, DHCP, NTP, FTP DDNS, UDP, uPnP,QoS,
  - b. SNMP, Bonjour, Zeroconf, Manual.

# **CERTIFICATIONS**

- 1. CE
- 2. FCC, Class A
- 3. IP66
- 4. IK10

# WARRANTY

Three (3) years, parts and labor

### APPROVED MANUFACTURERS

The indoor/outdoor fixed color IP dome camera shall be Vicon Industries Model V92x Series.

### 360° PANORAMIC IP CAMERAS

- 1. The camera shall utilize four high sensitivity 2 Megapixel CMOS sensors each with 1/2" optical format.
- 2. The camera shall integrate four 4mm megapixel IR corrected, F1.8, Horizontal Field of View of 96°.
- 3. The camera shall have vandal resistant dome enclosure with rated IP66 for water and dust protection.
- 4. The camera shall contain both hard ceiling mount and surface mount and with optional pendant mount, SV-CMT, wall mount, SV-WMT, flush mount adapter, SV-FMA, electrical box adapter, MV-EBA or SV-EBA, pole mount adapter, MD-PMA, corner mount adapter, MD-CRMA, and junction box adapter, SV-JBA.
- 5. The camera shall have a 2-axis easily adjustable gimbal with 360° pan 90° tilt for easy and accurate positioning.
- 6. The camera shall have a  $\pm 10^{\circ}$  tilt adjustment to locate the vertical position of each sensor.
- 7. The camera shall be H.264 (MPEG4, Part 10) compliant.
- 8. The camera shall have dual standard compression support with simultaneous streaming of both H.264 and MJPEG formats.

- 9. The camera shall have multi-streaming support of up to 8 non-identical concurrent streams (different frame rate, bit rate, resolution, quality, and compression format).
- 10. The camera's bit rate control shall be selectable from 100 Kbps to 10 Mbps for each independent stream.
- 11. The camera shall have privacy mask, the ability to select multiple regions of an arbitrary shape to block the video. This feature will be supported both in HTTP and TFTP protocols, as well as the on-camera web interface.
- 12. The camera shall have extended motion detection grid, a higher granularity grid of 1024 distinct motion detection zones in contrast to 64 zones supported earlier. User can select between the old 64 zone based motion detection and new extended motion detection to provide backward compatibility with the existing NVR integration. This feature will be supported both in HTTP and TFTP, as well as the on-camera web interface.
- 13. The camera shall have Real Time Streaming Protocol (RTSP) support allowing for compatibility with media players such as Apple QuickTime, VLC Player and others.
- 14. The cameras H.264 implementation shall maintain full real time video frame rates.
- 15. The camera shall output at a maximum resolution of 1600(H) x 1200(V) pixels per sensor for a total resolution of 6400(H) x 1200(V) 6 frames per second across all four sensors.
- 16. The cameras maximum frame rate shall be 22 frames per second across all four sensors at the maximum resolution of 1600(H) x 1200(V) per sensor.
- 17. The cameras maximum frame rate shall be 88 frames per second across all four sensors at the maximum resolution of 800(H) x 600(V) per sensor.
- 18. The cameras overall imaging shall provide a 360 degree field of view.
- 19. The camera shall feature streaming of the full field of view (FOV) and multiple regions of interest (ROI) for forensic zooming.
- 20. The camera shall be equipped with a 100 Mbps LAN connector and can deliver image data at a maximum data rate of up to 55 Megabits per second (55 Mbps).
- 21. The camera shall support a minimum HTTP, RTSP, RTP over TCP, RTP over UDP and TFTP network protocols.
- 22. Each sensor of the camera shall feature automatic exposure, automatic multi-matrix white balance, shutter speed control, programmable brightness, saturation, gamma and sharpness.
- 23. The camera shall also feature selectable 50/60 Hz flicker control, windowing and decimation, simultaneous delivery of full-field view and zoomed images at video frame rate, instantaneous electronic zoom, pan and tilt, and electronic image rotation by 180 degrees.
- 24. The camera shall incorporate necessary algorithms and circuits to detect motion in low light with clarity.
- 25. The camera shall support a minimum illumination of 0.1 Lux @ F1.8 in day mode ( Color version only)
- 26. The camera shall support a minimum illumination of 0.1 Lux @ F1.8 in day mode and 0 Lux @ F1.8 in night mode ( Day/Night version)
- 27. The camera's primary power source shall be Power over Ethernet (PoE) complying with the IEEE 802.3af standard.
- 28. The camera shall have the alternative option to be powered from a 12V DC up to 48V DC or 24V AC power source providing at least 9 W of power.
- 29. The camera shall be utilized for indoor and outdoor applications.

- 30. The camera's operating ambient temperature is -30°C (-22°F) to +55°C (131°F) and storage temperature -60°C (-76 °F) to +60°C (140 °F).
- 31. The camera shall be FCC Part 15, Class A, CE and RoHS compliant.
- 32. The camera shall be UL listed.
- 33. The camera shall have dimensions of: 6.9"H (176 mm) x 6.8" dia. (175 mm) weighing 2lbs (0.91kg).
- 34. The camera shall have die-cast aluminum chassis with 5.5" vandal resistant polycarbonate dome bubble with IK10 rated.

# MINIMUM PERFORMANCE SPECIFICATION

Megapixel camera must meet the following operating requirements

- 1. Operational
  - a. Imaging Four 2 megapixel CMOS image sensors
    - i. 1/2" optical format
    - ii. Bayer mosaic RGB filter
  - b. Active Pixel Count 1600(H) x 1200(V) pixel array per sensor
    - iii. 6400(H) x 1200(V) pixels across all four sensors
  - c. Minimum illumination Day Mode: 0.1 Lux @ F1.8
    - iv. Night Mode: 0 Lux @ F1.8, IR sensitive (D/N version)
  - d. Dynamic range 61 dB
  - e. Maximum SNR 50 dB
- 2. Full Field of View (FOV) Resolutions per Sensor
  - a. 6400(H) x 1200(V) 8megapixel
  - b. 3200(H) x 600(V) 1/4 resolution
- 3. Data Transmission
  - a. Data rate
  - b. bit rate control from 100Kbps to 10Mbps
- 4. Video frame rate up to:
  - a. 6 FPS @ 6400x1200
  - b. 20 FPS @ 3200x600
  - c. 22 FPS @ 1600x1200
- 5. Compression type
  - a. H.264 (MPEG4, Part 10)
  - b. Motion JPEG
  - c. 21 levels of quality
  - c. TFTP, HTTP, RTSP, RTP over TCP, RTP over UDP image transmission protocols
  - d. 100 Base-T Ethernet Network Interface
  - e. Multi-streaming: 8 non-identical streams

# **PROGRAMMABILITY**

- 1. Auto Exposure (AE) and Gain Control (AGC) > 120dB
- 2. On-camera real-time motion detection with 1024 detection zones per sensor
- 3. Programmable backlight compensation
- 4. Auto multi-matrix white balance

- 5. 50/60Hz selectable flicker control
- 6. Electronic pan, tilt, zoom (PTZ)
- 7. Electronic image flip 180 degree rotation
- 8. Resolution windowing down to 32x32 pixels window
- 9. Programmable shutter speed to minimize motion blur
- 10. MoonLight<sup>™</sup> mode extended exposure and proprietary noise cancellation
- 11. Programmable resolution, brightness, saturation, gamma, sharpness, tint
- 12. Picture-in-Picture: simultaneous delivery of full field of view and zoomed images
- 13. Bandwidth & storage savings by running at 1/4 resolution

## **ELECTRICAL**

- 1. General purpose opto-coupled input and output
- 2. Power over Ethernet (PoE): PoE 802.3af
- 3. DC input: auxiliary 12V-48V DC
- 4. AC input: auxiliary 24V AC
- 5. Power consumption 9 Watts maximum

# **MECHANICAL**

- 1. 2-axis easily adjustable gimbal with 360° pan 90° tilt
- 2. +/- 10° tilt adjustment to locate the vertical position of each sensor
- 3. Hard ceiling mount and surface mount embedded
- 4. Die-cast aluminum chassis with 5.5" vandal resistant polycarbonate dome bubble with IK10 rated
- 5. Dimensions (H x Dia) 6.9"H (176 mm) x 6.8" dia. (175 mm) (Weight 2 lbs (0.91kg)

### **ENVIRONMENTAL**

- 1. IP66 weatherproofing standard
- 2. Operating temperature  $-30^{\circ}$ C (-22 °F) to  $+55^{\circ}$ C (131°F)
- 3. Storage temperature  $-60^{\circ}$ C (-76 °F) to  $+60^{\circ}$ C (140 °F).
- 4. Humidity 0% to 90% (non condensing)

### **HEATER & BLOWER ELECTRICAL**

- 1. Voltage Input: 12V to 20V DC/24VAC (separate power required)
- 2. Power Output: 11W Max (DC12V); 13W Max (AC24V)
- 3. Heater Switch: On: 17C° (62.6 °F), Off: 30 °C (86 °F)
- 4. Blower Switch: On: 10°C (50°F), Off: 15 °C (59 °F)
- 5. Blower Switch: On: 50°C (122°F), Off: 45 °C (113°F)

# **REGULATORY**

- 1. FCC, Class A
- 2. CE and RoHS compliant
- 3. UL Listed

# **ACCESSORIES**

SV-WMT: Wall Mount
 SV-PMT: Pendant Mount

3. SV-FMA: Flush Mount

4. MD-PMA: Pole Mount

5. MD-CRMA: Corner Mount

MV-EBA: Electrical Box Adaptor
 SV-EBA: Electrical Box Adapter
 SV-JBA: Junction Box Adapter

# **OPTICS**

4mm, F1.8, Horizontal FOV=96°

# WARRANTY

Three (3) years, parts and labor

# APPROVED MANUFACTURERS

The camera shall be a Arecont Vision model AV8365x series Panoramic IP Camera

# **CORNER-MOUNTED CELL CAMERA**

- 1. The indoor high-security camera shall incorporate housing, camera, lens and 36 IR illuminators; the brightness of the IR illuminators shall be adjustable. Its design shall be specifically for use in custodial suites and prison cells. The high-resolution day/night camera shall be available with an integral 2.5 mm wide angle lens.
- 2. The camera shall be waterproof and shall fit into a 90° corner. It shall consist of a two part stainless steel assembly, a fixed mounting frame and a removable front plate. The front plate shall be recessed and secured to the fixed frame with security screws. The front plate shall have two 10 mm thick windows to protect the camera and IR LED illuminators. Once installed, it shall be able to be permanently sealed to the wall to make the housing ligature proof.
- 3. The camera shall support proprietary H.264, MPEG-4 and M-JPEG compression. The camera shall have an adjustable mount that shall allow it to be tilted up or down for an exact view.
- 4. The camera shall be powered by PoE, 12 VDC or 24 VAC.
- 5. The camera shall provide alarms and audio. Privacy masks shall be available.
- 6. The camera shall meet or exceed the following design and performance specifications.

# DAY/NIGHT CAMERA SPECIFICATIONS

1. Imaging Device: 1/3-inch CCD

2. Horizontal Resolution: 640 TVL (b&w); 600 TVL (color)

3. Synchronization: Line lock

4. Camera Type: Day/night (electronic)

5. Signal-to-Noise Ratio: 50 dB (AGC off)

6. Sensitivity: Day:0.01 fc (0.1 lux);

a. Night: 0.003 fc (0.03 lux

7. Lens: Focal Length: 2.5 mm

a. Horizontal Field-or-View: 104°
b. Vertical Field-or-View: 80°

## **NETWORK VIDEO TRANSMISSION**

- 1. Compression: H.264, MPEG-4 or M-JPEG
- 2. Video Streams: 10 concurrent streams mas.
- 3. Video Resolution: D1, VGA, QVGA, CIF
- 4. Frame rate: 30 FPS at H.264/M-JPEG VGA (25 FPS, PAL)
- 5. Video Bandwidth: 10/100 Mbps

## ANALOG VIDEO TRANSMISSION

- 1. Maximum Transmission Distance: Up to 3000 ft (915 m) @ 12 AWG
- 2. Video Output Impedance: CVBS 1.0 V p-p, 75 ohm

## **ELECTRICAL SPECIFICATIONS**

- 1. Input Voltage: 24 VAC, 12 VDC or PoE
- 2. Current @ 24 VAC: IP: 0.35 A; Analog: 0.23 A
- 3. Power Consumption: IP: 8.5 W; Analog: 5.5 W
- 4. Connectors: Power: 24 VAC: screw terminal; PoE RJ-45;
- 5. Terminal; Analog Video: BNC; Portable Monitor: DIN.
- 6. Radio Frequency
- 7. Emission Rating: FCC Class A

#### **ENVIRONMENTAL SPECIFICATIONS**

Operating Temperature: 32° to 122°F (0° to 50°C)

## PHYSICAL SPECIFICATIONS

- 1. Application: Indoor
- 2. Construction: Enclosure: stainless steel; brushed satin
  - a. Window: polycarbonate
- 3. Mounting: Designed to be mounted into a 90° corner; front cover
  - a. secured with security screws
- 4. Dimensions: 15 in. (380 mm) x 12.6 in. (320 mm)
- 5. Weight: Approximately 3.5 lb (1.6 kg)

## **CERTIFICATIONS**

FCC, Class A

#### WARRANTY

Three (3) years, parts and labor

## APPROVED MANUFACTURERS

The corner-mount IP cell camera shall be Vicon Industries Model V-CELL-IP.

## Summary of Work

- 1. Vendor shall install and configure two VMDC-4 Virtual Matrix Display Controller towers at specified areas to manage and view cameras from inside and outside all buildings and areas.
- 2. Vendor shall install and configure one VMDC-4 Virtual Matrix Display Controller tower at Central Control with one 22" flat panel monitor as main monitor control display and two 32" flat panel monitors for viewing.
- 3. Vendor shall install and configure one VMDC-4 Virtual Matrix Display Controller tower at gym main desk area with one 22" flat panel monitor as main monitor control display and one 32" flat panel monitors for viewing
- 4. All VMDC shall be enclosed to prevent tampering using a computer security enclosure that is lockable. This prevents non-key holders from tampering and port access on all VMDC stations.
- 5. All work performed in all Sections shall be performed in a series of stages building by building or area by area in order not to disrupt daily business or institution activities.

## **PRODUCTS**

## VIRTUAL MATRIX DISPLAY CONTROLLER DESCRIPTION

- 1. The Virtual Matrix Display Controller (VMDC) shall be a self-contained, matrix control solution for the Video Management System (VMS). It shall be designed to provide users with the ability to direct network video to multiple monitor displays using a keypad, graphical user interface (GUI) controls or Programmable Logic Controller (PLC). In addition, it shall have the ability to receive data from external systems via the Events Management system in the ViconNet VMS software, and use those inputs to trigger macros in response to the input.
- 2. The VMDC solution shall be comprised of both a matrix command/control center software interface and a hardware decoding component that enables high-quality remote network video streams to be displayed on multiple monitors in multiple locations. The design shall enable each operator to display any camera on any monitor connected to the network. Camera selection may be controlled via a dedicated keypad or by using the graphical user interface.
- 3. The VMDC system shall be scalable. A single VMDC unit shall control up to 6 high-definition monitors. Control of additional monitors shall be accomplished by connecting additional VMDC units to the network and/or using video decoder appliances..
- 4. The unit shall be available in rack or tower enclosures. The software shall also be available for installation on a PC that meets the minimum requirements as specified in this document.

#### VMDC SOFTWARE DESCRIPTION

- 1. The VMDC shall be controlled from a graphic user interface (GUI) incorporating video display areas, toolbars, control palettes, and site/device lists. The system shall also allow camera-to-monitor selection and camera PTZ control on a keypad controller or PLC.
- 2. The VMDC shall take live or recorded video inputs and provide the operator with the ability to direct the video to any monitor connected to it, including monitor walls or monitors connected to additional VMDCs on the network. The VMDC shall be available with licenses to support 2, 4 or 6 monitors. Licenses shall be upgradeable at any time up to the maximum of 6 monitors.
- 3. Each VMDC shall support up to 4 keypads/serial host interface.

- 4. The VMDC shall provide the following video performance.
  - FPS is the frame rate; Res is the resolution; and Streams are the number of simultaneous video streams that can be displayed.

Compression Type	Res	FPS	Decoder1 Streams	Dual Monitor2 Streams	Multi- Monitor3 Streams
	2 CIF	7.5	150	64	104
		15	106	64	52
ViconNet		30	53	43	26
MPEG-4	D1	7.5	144	64	88
		15	72	64	44
		30	36	33	22
	2	7.5	144	64	88
	CIF	15	72	64	44
		30	36	33	22
	D1	7.5	52	64	44
		15	26	44	22
H.264		30	13	22	11
п.204	2 MP	3	28	32	24
		7	14	16	12
		15	7	8	6
	5 MP	1	44	56	40
		2	22	28	20
		4	11	14	10

- Decoder consists of two VMDC units. One unit provides six display monitor outputs. The other acts as the display controller
- Dual Monitor consists of one VMDC that provides a display monitor output and a display controller.
- Multi-Monitor consists of one VMDC that provides up to five (5) display monitor outputs and a display controller.
- 5. The VMDC shall support H.264, MPEG-4 and M-JPEG compression. High-definition video up to five (5) megapixels (2560 x 1600) and 16 x 9 monitors shall also be supported.
- 6. The monitors connected to the VMDC shall display 1, 4, 9, 16, 25, 36 or 64 segment views. The monitors shall be graphically depicted on the VMDC GUI Main Window interface. The selected monitor shall be highlighted in red for easy identification. Video shall be played back on a selected monitor. Playback shall be selected by date and time or, by mouse click for quick playback.
- 7. The VMDC shall display titles, when enabled, and the operator shall have the ability to send text messages to the monitor for display. Up to 20 characters shall be able to display. Alarms shall display either on certain dedicated monitors only or on all monitors, if so configured.

- 8. The VMS software shall provide Authorization rights setup for users for an administrator using the Site Authorization screen. Group rights shall be configurable by specific site. VMDC users shall be granted certain rights and access or full control based on their individual requirements.
- 9. The VMDC Main Window shall provide the following:
  - a. The Site and Device list depicting all DVRs, video encoders and IP cameras connected to the local VMDC. The Site and Device list shall provide a physical list of all known network sites and connected cameras, PTZ cameras and microphones. The cameras, PTZ cameras and microphones shall be represented by graphical symbols.
  - b. Within the Site and Device list, each unit shall be depicted with all connected devices such as: cameras connected (differentiating between PTZ and fixed cameras) and microphones.
  - c. The number of segments each monitor is displaying: 1, 4, 9, 16, 25, 36 or 64.
  - d. Components in the Site and Device list shall be selectable and configurable.
  - e. When a PTZ dome camera is selected, an operator shall be able to:
    - Control pan, tilt, zoom, iris and focus, including autoiris and autopan.
    - Program preset positions.
    - Execute preset positions.
    - Complete programming of menus embedded in the selected dome.
  - f. All PTZ programming and control shall be achieved remotely without requiring an operator to be present at the recorder where the PTZ camera is connected.
  - g. PTZ control shall be performed dynamically onscreen, and not require an operator to click on arrows to move the PTZ camera.
  - h. The PTZ control shall be fully variable by dynamically moving the cursor across the video display.
  - i. The PTZ interface shall control all operation and programming functions of Vicon SVFT domes and basic functions of PTZ domes by other manufacturers.
  - j. Access to all available programming menus.
  - k. Access to external controls, and reports for Alarm History, Audit Log and CFN log.
- 10. Viewing of live cameras shall be performed by:
  - a. Clicking on the monitor display location and then the desired camera in the Site and Device
  - b. "Drag-and-Drop" from the Site and Device list to the location in the Monitor Display Layout.
  - c. The software shall permit viewing of live video from any camera connected to the system.
  - d. The software shall support on-demand recording (manual recording) to a remote location.
  - e. The software shall support playback from the Main Window in the following formats:
    - Quick playback –the user shall be able to select and launch playback for ViconNet® encoded cameras in a pre-defined number of seconds before the live image. The playback window shall open in the selected monitor location.
    - Playback from time shall allow setting the playback to start from a specific date, time and database on the network. This shall allow playing back the same camera several times.
- 11. Access to programming and more advanced screens shall be done by means of an immobile, permanently docked toolbar located on the top live screen. The toolbar shall provide access to the following major functionality of the system:

- a. Scheduler/Macro.
- b. Reports.
- c. Setup.
- d. Logout.
- 12. The software shall provide an advanced method for creating and executing software commands. This shall be achieved by the use of macros. Macro configuration shall be defined for recorded cameras and microphones, command duration, recording location, local viewing, device ID, picture quality, refresh mode, recording rate (fps), related devices (sensors) and alarm activation.
- 13. Macros shall allow an authorized user to create and schedule software commands that shall include but are not limited to:
  - a. Sequencing cameras, including multi-screen displays on selected monitors.
  - b. Execute remote macros existing on recorders currently connected to the network.
  - c. Record cameras at different qualities and frame rates from any recorder on the network.
  - d. Send an alarm condition to any recorder and workstation on the network. By the use of macros, an authorized user shall be able to program the destination component of the alarm condition.
  - e. An authorized user shall be able to program and execute macros remotely without the need to be physically located at the recorder that the macros will be programmed on.
  - f. The Schedule/Macro button shall allow the running of preconfigured combinations of camera, sensor and PTZ programmed routines.
  - g. Macro scheduling shall include but is not limited to:
    - Days of the week when a macro is active.
    - Start and end time for when a macro is active.
    - If a macro is to run continuously or not.
  - h. A macro shall be able to run every 5 min, 10 min, 1/4 hour, 1/2 hour, 3/4 hour, 1 hour, 2 hours, 3 hours, 4 hours, 6 hours, 8 hours and 12 hours.
- 14. The Network Settings and Site Name utility shall allow:
  - a. Setup of a system Nucleus, which is the central station of the VMS.
  - b. Time synchronization of all components on the network.
  - c. All appropriate networking features including each server IP, Subnet and Gateway.
- 15. There shall be a Language Translation Utility (LTU). It shall allow a manual translation of the entire GUI into any language that uses varying alpha-numeric character sets. The utility shall also store files for simple changing from one language to another.

## **WORKSTATION SPECIFICATIONS**

Operating System: Microsoft® Windows® 7 Ultimate.

CPU: Intel® Core™ i7-920 processor.

RAM: 4 GB.

Hard Drive: 250 GB minimum.

Video Card: Sapphire ATI HD 5650.

Power Supply: 750 W minimum.

## **MECHANICAL SPECIFICATIONS**

Application: Indoor.

Rack Standard 19 in. (483 mm) rack mount and

Mounting: stackable, 4U height.

Dimensions: Rack-Mount:

7" (177.8 mm) H x 18.75" (476 mm) W x 24.25" (616 mm) D, including connectors.

Tower:

7" (177.8 mm) W x 18.5" (470 mm) L x

16" (406.4 mm) D

Weight: Rack-Mount: 50.0 lb (22.6 kg).

Tower: 22.7 lb. (10.32 kg).

Construction: Steel case and hardware.

## **ENVIRONMENTAL SPECIFICATIONS**

Operating

Temperature:  $32^{\circ}$  to  $104^{\circ}$ F ( $0^{\circ}$  to  $40^{\circ}$ C).

Humidity: Up to 95% relative, non-condensing.

Ideal Room

Temperature:  $66^{\circ}$  to  $75^{\circ}$ F ( $19^{\circ}$  to  $25^{\circ}$  C).

Ideal Room Humidity:

Up to 80% relative, non-condensing.

Maximum Room

Temperature: 50° to 86°F (10° to 30° C).

Storage

Temperature -4 to 158° F (-20 to 70° C) maximum.

Range:

## **SOFTWARE SPECIFICATIONS**

Graphical Graphical site map that supports realistic camera

Map: location.

Quick Playback: Starts video playback of live camera with a few

clicks.

The interface graphically displays a virtual

Local and representation of all monitors connected in the

Remote monitor system and permits flexible display

Control: configurations and drag-and-drop camera

selection.

Operator has full PTZ control of any PTZ

PTZ Control: camera in the system using the GUI, keypad or

PLC.

Macros can be defined for recording or

Macro displaying/playing cameras, microphones and related devices (sensors) as well as sending

alarm notification through email or SMS text

message.

Group rights can be configured by specific site.

Authorization Rights provide authority to perform all system

Rights: functions.

Alarms: Alarms can be programmed to annunciate under

special conditions.

Central Failure Utility that provides notifications indicating

Notification (CFN): certain applications have failed.

#### **CERTIFICATIONS**

FCC, Class A

## **WARRANTY**

Three (3) years, parts and labor

## APPROVED MANUFACTURERS

The Virtual Matrix Display Controller shall be Vicon Industries model:

• VMDC-4 Virtual Matrix Display Controller with 4 display outputs Tower unit.

## 21.5-INCH FLAT PANEL LCD MONITOR

- 1. The monitor shall be a flat panel LED color monitor with a 21.5-inch (546 mm) screen size. It shall have a resolution of 1920x1080 @ 60 Hz. It shall provide two composite video inputs with looping outputs, one VGA input, one DVI input and one HDMI input. PC stereo audio inputs and outputs shall also be provided.
- 2. The monitor shall have a 3D comb filter, de-interlace function, picture-in-picture (PIP) and picture-by-picture (PBP).
- 3. Front panel controls shall include a power switch and indicator, video input (Source) selection, cursor and adjustment up and down, volume control and a Menu button for the OSD. The OSD menu allows adjustment of volume, brightness, contrast, color, tint, sharpness, language, horizontal and vertical position, key lock, backlight, titling display, and VGA set up.
- 4. The monitor shall have to ability to be desk or wall-mounted.

## 22-INCH FLAT PANEL LCD MONITOR SPECIFICATIONS

Horizontal

Resolution: 1920 x1080 @ 60 Hz

Scanning

System: NTSC/PAL, automatic selection

Contrast Ratio: 1000:1

Brightness: 250 cd/m2

Aspect Ratio: 16:9

Color Depth: 16.7 M

Pixel Pitch: 0.248 mm

Response Time: <5 ms

Special

Features: 3D comb filter, De-interlace function, PIP/PBP.

A. Input Voltage: 100-240 VAC, 50/60 Hz, voltage converter included

provides 12 VDC to monitor

B. Current: 1.8 A @ 12 VDC

Power

C. Consumption: 21.6 W

## **ENVIRONMENTAL SPECIFICATIONS**

A. Operating 32° to 104°F (0° to 40°C)

Temperature:

B. Operating Humidity: 10 to 80% non-condensing

## **MECHANICAL SPECIFICATIONS**

16. Mounting: Α. 17. Desktop or VESA 100 mm wall-mount

18. Viewing Angle: B. 19. 170°/160° (Horizontal/Vertical)

21. Height: 14.56 in. (370 mm); Width: 20.25 20. Dimensions: C. in. (514.5 mm); Depth: 1.77 in. (45 mm)

22. Weight: 23. 8.4 lb (3.8 kg) D.

## **CERTIFICATIONS**

A. TUV

B. CE

C. FCC, Class A

## WARRANTY

Three (3) years, parts and labor

## APPROVED MANUFACTURERS

The 21.5-inch monitor shall be Vicon Industries Model VM-6215LED.

## 32-INCH FLAT PANEL LED MONITOR

- The monitor shall be a flat panel LED color monitor with a 32-inch (813 mm) screen size. It shall have a resolution of 1920x1080 @ 60 Hz. It shall provide two composite video inputs with looping outputs, one S-Video input and output, one VGA input, one component input, one DVI input and one HDMI input. PC stereo audio inputs shall also be provided.
- 2. The monitor shall have a 3D comb filter, de-interlace function, picture-in-picture (PIP) and picture-by-picture (PBP). It shall have a refresh rate of 120 Hz.
- Front panel controls shall include a power switch and indicator, video input (Source) selection, 3. cursor and adjustment up and down, volume control and a Menu button for the OSD. The OSD menu allows adjustment of volume, brightness, contrast, color, tint, sharpness, language, horizontal and vertical position, key lock, backlight, titling display, and VGA set up.
- 4. The monitor shall have to ability to be desk or wall-mounted.

## 32-INCH FLAT PANEL LCD MONITOR SPECIFICATIONS

Horizontal 1920x1080 @ 60 Hz

A. Resolution:

Scanning System: NTSC/PAL, automatic selection B.

Contrast Ratio: 3000:1 C.

350 cd/m2 Brightness: D.

16:9 Aspect Ratio: E.

16.7M Color Depth: F.

Pixel Pitch: 0.36375 mm G.

< 6.5 msResponse Time: H.

Special Features: 3D comb filter, De-interlace function, I.

PIP/PBP.

## **ELECTRICAL SPECIFICATIONS**

A. Input Voltage: 100-240 VAC, 50/60 Hz

B. Current: 0.5 A @ 115 VAC; 0.24 A @ 230 VAC

Power 55 W C.

Consumption:

## **ENVIRONMENTAL SPECIFICATIONS**

**Operating** 32° to 104°F (0° to 40°C) A.

Temperature:

Operating 10 to 80% non-condensing B.

**Humidity:** 

## **MECHANICAL SPECIFICATIONS**

Mounting: Desktop or optional wall-mount A.

Viewing Angle: 178°/178° (Horizontal/Vertical) B.

Dimensions: Height: 17.68 in. (449 mm); Width: 38.98 C.

in. (792 mm); Depth: 2.6 in. (66.1 mm)

Weight: 28.7lb (13 kg) D.

## **CERTIFICATIONS**

- 1. TUV
- 2. CE
- 3. FCC, Class A

## **WARRANTY**

Three (3) years, parts and labor

#### APPROVED MANUFACTURERS

The 32-inch monitor shall be Vicon Industries Model VM-632LED, ViconNet Web.

## Summary of Work

- 1. Vendor shall install and configure ViconNet Web Service Software on an owner provided dedicated server.
- 2. All work performed in all Sections shall be performed in a series of stages building by building or area by area in order not to disrupt daily business or institution activities.

## **PRODUCT**

- 1. ViconNet Web Service Description
  - a. The ViconNet Web Service runs as a Windows® system service and provides a web server for the viewers; it is designed as a dedicated server and cannot run together with ViconNet or MDC. This dedicated server allows a higher number of concurrent users (up to 25 tested).
  - b. The Web Service shall be licensed software only that can be installed on a PC or dedicated server that meets the minimum requirements.
  - c. The ViconNet Web Service is compatible with ViconNet versions 4, 5 and 6.
- 2. PC Minimum Requirements:
  - a. Operating System: Microsoft® Windows® XP, 7, 2008 Server.
  - b. CPU: Intel<sup>®</sup> Core<sup>™</sup> 2 Duo 2.66 GHz processor.
  - c. RAM: 2 GB.
  - d. Hard Drive: 250 GB minimum.
  - e. LAN Card: 1 GB.
  - f. Video Card: Recommended video adapter with onboard 128 MB RAM.

## APPROVED MANUFACTURERS

ViconNet Web Service Software VN-WEB-SW.

## **CCTV REVIEW STATIONS**

## Summary of Work

- 1. Vendor shall provide a complete Dell dual monitor solution for three Harris County Dell domain workstations in order to perform administrative tasks using Vicon-Net software.
- 2. Vendor shall install compatible dual video card and Dell dual monitor panels with dual stand onto specified Harris County Dell domain workstations in specified area and buildings.

- 3. Vendor shall install and configure Vicon-net on to three Harris County Dell domain workstations in order to perform administrative tasks using Vicon-Net software in specified areas and buildings.
- 4. The Dell dual monitor solution and Vicon-Net software shall be installed on the Superintendent, Assistant Superintendent and the Shift Supervisor's Dell domain computer.
- 5. All work performed in all Sections shall be performed in a series of stages building by building or area by area in order not to disrupt daily business or institution activities.

## **PRODUCT**

## **System Requirements**

- 1. The Dell dual monitor solution shall include a compatible video card and six Dell Professional 22-inch Widescreen Panels with Dual Monitor Stand, installed onto specified workstations in specified areas and buildings.
- 2. A backup of each workstation with Vicon-Net software installed and configured shall have a backup DVD and restore image.

#### **EXECUTION**

## Examination

- 1. Working Order Verify that all equipment is in working order and within heat tolerances
- 2. Installation Verify that the equipment has been installed in accordance will all codes and complies with the Security Electronics General Section and Division 16 requirements
- 3. Confirm and verify all equipment is in a pristine new condition with manufacturer's warranty still intact. Make sure all wiring has been tied down and dressed out to professional standards.
- 4. Confirm all equipment is clean, wiped off and ready for occupancy and Harris County use.

## Closeout

- 1. In the presence of a Harris County representative and Harris County, verify that the material and software provided meets this specification. If there are deficiencies and the vendor was at fault or negligent, the vendor is responsible for immediate correction.
- 2. Training Verify all training has been completed as is described in Security Electronics General Section
- 3. As-Built Documentation Deliver as-built documents for this section and all sections of the Security Electronics Division. Also deliver all documents, instructions and literature that came with the material in this section.

## **REFUSE/TRASH**

## Summary of Work

- 1. Repair, restore, and refinish to original appearance all areas as needed.
- 2. Vendor is responsible for removing refuse, debris, trash and non-recyclables materials from construction site and all work areas.
- 3. All removed refuse, debris, trash and non-recyclables materials are to be placed in transparent bags for disposal, transparent disposal bags are furnished by Vendor.

- 4. All work performed in all Sections shall be performed in a series of stages building by building or area by area in order not to disrupt daily business or institution activities.
- 5. All work areas should be free of trash and debris at the end of the day.

## **PRICING/DELIVERY INFORMATION**

Provide pricing for the proposed Surveillance with Internet Protocol Based Closed Circuit Television System for the Harris County Juvenile Probation Department including all hardware, software and services. Pricing MUST be provided in hard paper copy and two (2) CD versions, and a spreadsheet of the bill of materials must be furnished.

## RENEWAL OPTIONS (MAINTENANCE AND SUPPORT ONLY)

Harris County may consider four (4) one year renewal options, renewable one year at a time, based upon the same terms, conditions and pricing as the original year. Renewal is subject to approval by Harris County Commissioners Court. Once renewal options are exhausted, the contract must be rebid. Harris County reserves the right to rebid at any time as is in its best interest and is not automatically bound to renew.

Job No.	: <u>14/0317</u>	TAY FOD	Attachment a M/DEBT/RESIDENCE CERTIFICATION
			(for Advertised Projects)
Taxpaye	er Identification	Number (T.I.N.)	):
Compan	y Name submi	tting Bid/Proposa	l:
Mailing	Address:		
Are you	registered to d	o business in the	State of Texas?
-			nd addresses of any partnership of which you are a general partner or perate your business
			erty in Harris County owned by you or above partnerships as well as any t of paper if necessary.)
Harris C	County Tax Acc	et. No.*	Property address or location**
		<u> </u>	
		<u> </u>	
** For the a	real property, ddress where t	specify the proper he property is loc	tion number assigned by the Harris County Appraisal District.  rty address or legal description. For business personal property, specify tated. For example, office equipment will normally be at your office, but see or other location.
		<u>Debt</u> - Do you oolls, court judgme	we any debts to Harris County (taxes on properties listed in I above, ents, etc.)?
	Yes	☐ No	If yes, attach a separate page explaining the debt.
	County reques	s Residence Cer	suant to Texas Government Code §2252.001 <i>et seq.</i> , as amended, Harris tification. §2252.001 <i>et seq.</i> of the Government Code provides some overnmental contracts; pertinent provisions of §2252.001 are stated below:
	(3) "Nonresi	dent bidder" refer	s to a person who is not a resident.
	, ,		to a person whose principal place of business is in this state, whose ultimate parent company or majority owner has its principal

I certify that \_\_\_\_\_\_ is a Resident Bidder of Texas as defined in Government [Company Name]

is a Nonresident Bidder as defined in Government Code

[City and State]

Revised 11/09

place of business in this state.

[Company Name] §2252.001 and our principal place of business is \_\_\_\_\_

Code §2252.001.

I certify that \_\_\_\_\_

## MINIMUM INSURANCE REQUIREMENTS

During the term of the Contract, the Contractor at its sole cost and expense shall provide <u>primary</u> commercial insurance of such type and with such terms and limits as may be reasonably associated with the Contract. As a minimum, the Contractor shall provide and maintain the following coverage and limits:

**A.** Workers Compensation, as required by the laws of Texas, and Employers' Liability, as well as All States, USL&H and other endorsements if applicable to the project, and in accordance with state law.

## Employers' Liability

•	Each Accident:	\$1,000,000
•	Disease-Each Employee:	\$1,000,000
•	Policy Limit:	\$1,000,000

**B.** Commercial General Liability, including but not limited to the coverage indicated below. Coverage shall not exclude or limit Products/Completed Operations, Contractual Liability, or Cross Liability. Where exposure exists, the County may require coverage for watercraft, blasting, collapse, explosions, blowout, cratering, underground damage, pollution, or other coverage. *Harris County shall be named Additional Insured on primary/non-contributory basis*.

•	Each Occurrence:	\$1,000,000
•	Personal and Advertising Injury:	\$1,000,000
•	Products/Completed Operations:	\$1,000,000
•	General Aggregate (per project):	\$2,000,000

- **C. Automobile Liability**, including coverage for all owned, hired, and non-owned vehicles used in connection with the contract. *Harris County shall be named Additional Insured on primary/non-contributory basis*.
  - Combined Single Limit-Each Accident: \$1,000,000
- **D.** Umbrella/Excess Liability (Harris County shall be named Additional Insured on primary/non-contributory basis)

• Each Occurrence/Aggregate: \$1,000,000

E. Professional/Errors & Omissions Liability (if applicable)

• Each Occurrence/Aggregate: \$1,000,000

The County reserves the right to require additional insurance if necessary. Coverage shall be issued by companies licensed (by TDI) to do business in Texas and who have an A.M. Best rating of at least A-. Contractor shall furnish evidence of such insurance to the County in the form of unaltered insurance certificates. If any part of the contract is sublet, insurance shall be provided by or on behalf of any subcontractor, and shall be sufficient to cover their portion of the contract. Contractor shall furnish evidence of such insurance to the County as well.

Policies of insurance required by the contract shall waive all rights of subrogation against the County, its officers, employees and agents. If any applicable insurance policies are cancelled, materially changed, or non-renewed, contractor shall give written notice to the County at least 30 days prior to such effective date and within 30 days thereafter, shall provide evidence of suitable replacement policies. Failure to keep in force the required insurance coverage may result in termination of the contract. Upon request, certified copies of original insurance policies shall be furnished to the County.

The requirements stipulated in this attachment do not establish limits of contractor liability.

Rev. 10/2011

#### TWCC RULE 110.110 WORKERS' COMPENSATION INSURANCE COVERAGE

If this bid/proposal package is for a building or construction contract, all of the provisions of this rule as shown below apply. Since this is a mandatory requirement, cost increases should not be experienced because of the need to comply with the Texas Workers' Compensation Law. For additional information contact the Texas Workers' Compensation Commission, Southfield Building, 400 S. IH-35, Austin, Texas 78704-7491, (512) 440-3618.

#### A. Definitions:

<u>Certificate of coverage ("Certificate")</u> - A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement, TWCC-81, TWCC-82, TWCC-83, or TWCC-84 showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project.

<u>Duration of the project</u> - Includes the time from the beginning of the work on the project until the contractor's/person's work on the project has been completed and accepted by the governmental entity.

Persons providing services on the project ("subcontractor" in §406.096) - Includes all persons or entities performing all or part of the services the contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractors, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" include, without limitation, providing, hauling or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

- B. The Contractor shall provide coverage, based on proper reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all employees of the contractor providing services on the project, for the duration of the project.
- C. The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract.
- D. If the coverage period shown on the Contractor's current certificate of coverage ends during the duration of the project, the Contractor must, prior to the end of the coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.
- E. The Contractor shall obtain from each person providing services on a project, and provide to the governmental entity:
  - (1) A certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and
  - (2) No later than seven (7) days after receipt by the Contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.
- F. The Contractor shall retain all required certificates of coverage for the duration of the project and for one (1) year thereafter.
- G. The Contractor shall notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.

- H. The Contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Workers' Compensation Commission, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.
- I. The Contractor shall contractually require each person with whom it contracts to provide services on a project to:
  - (1) Provide coverage, based on reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all its employees providing services on the project, for the duration of the project.
  - (2) Provide to the Contractor, prior to that person beginning work on the project a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project.
  - (3) Provide the Contractor, prior to the end of coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.
  - (4) Obtain from each other person with whom it contracts, and provide to the Contractor:
    - (a) A certificate of coverage, prior to the other person beginning work on the project, and
    - (b) a new certificate of coverage showing extension of coverage, prior to the end of the coverage period, if the coverage period shown on the current certificate of coverage ends during the duration of the project;
  - (5) Retain all required certificates of coverage on file for the duration of the project and for one (1) year thereafter.
  - (6) Notify the government entity in writing by certified mail or personal delivery, within ten (10) days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and
  - (7) Contractually require each person with whom it contracts, to perform as required by paragraphs (1) (7), with the certificates of coverage to be provided to the person for whom they are providing services.
- J. By signing this contract or providing or causing to be provided a certificate of coverage, the Contractor is representing to the governmental entity that all employees of the contractor who will provide services on the project will be covered by workers' compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.
- K. The Contractor's failure to comply with any of these provisions is a breach of contract by the contractor which entitles the governmental entity to declare the contract void if the Contractor does not remedy the breach within ten (10) days after receipt of notice of breach from the governmental entity.

## **REFERENCES**

Provide a minimum of five (5) references wherein your company has provided similar systems.

Reference #1
Organization Name:
Organization Name:
Address:
Services/Dates provided:
Reference #2
Organization Name:  Contact Name/Telephone No.:
Contact Name/ Telephone No
Address:
Services/Dates provided:
Scrvices/Dates provided.
Reference #3
Organization Name:
Contact Name/Telephone No.:
Address:
Services/Dates provided:

# REFERENCES (CONTINUED)

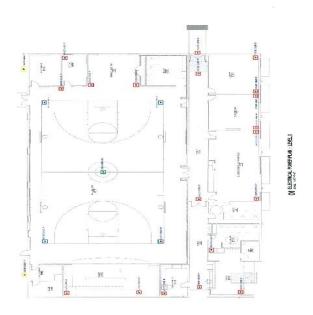
## Reference #4

Organization Name:
Contact Name/Telephone No.:
Address:
Services/Dates provided:
Reference #5
Organization Name:
Contact Name/Telephone No.:
Address:
Services/Dates provided:

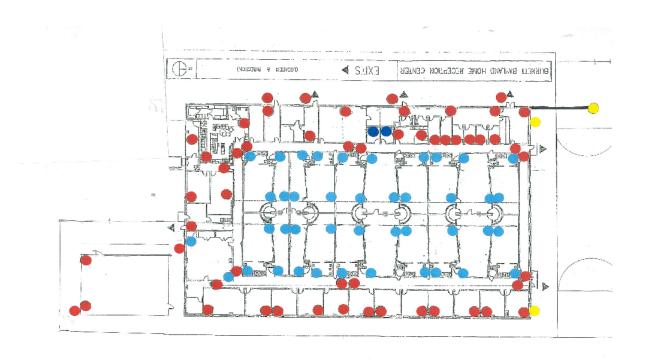
Map Key:

Light Blue Dot	- V922x HD Camera
Red Dot	- V920x SD Camera
Yellow Dot	- V923x HD Camera
Green Dot	- AV8365XCamera
Dark Blue Dot	- V-Cell-IP Camera

# BBRC Facility Diagrams Gymnasium



# Burnett-Bayland Rehabilitation Center



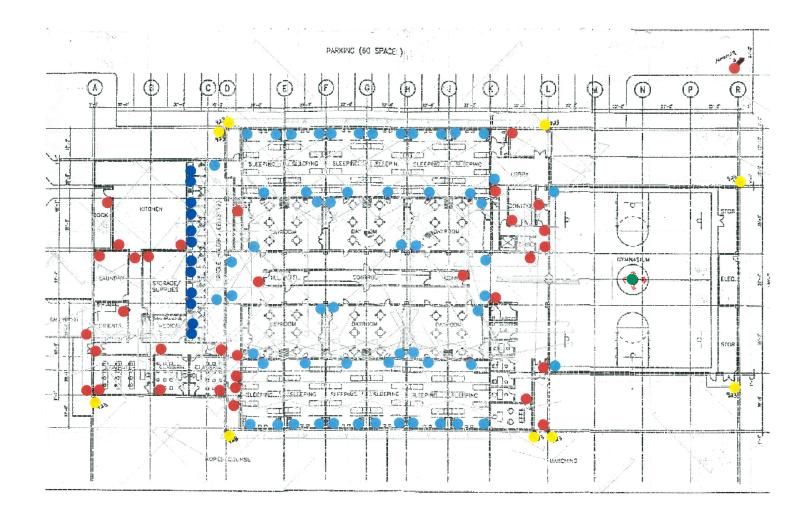
BBRC Camera & Major Components Counts		
<u>Description</u>	<b>QTY</b>	
IP Cameras - SD V920x/V-Cell-IP	75	
IP Cameras – MP V922x/V923x/AV8365x	52	
Video Encoders	0	
Network Video Recorder	4	
Web Server	1	
32" LCD Monitor	3	
Viewing Stations - Dual Mon.	3	
VMDC	2	
21" LCD Monitor	2	
Breakdown of 127 Camera Total		
BBRC	101	
BBH Gym	26	

Cameras: 127

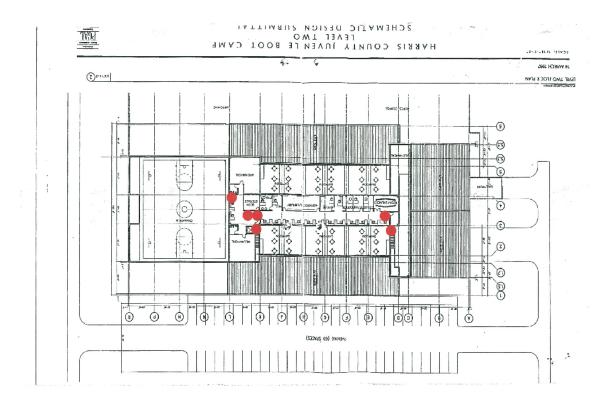
# Map Key:

Blue Dot	- V922x HD Camera
Red Dot	- V920x SD Camera
Yellow Dot	- V923x HD Camera
Green Dot	- AV8365xCamera
Dark Blue	- V-Cell-IP

# HCLA Facility Diagram



## Attachment j (Continued)



HCLA Camera & Major Components Counts		
<u>Description</u>	<u>QTY</u>	
IP Camera – Analog with IR	1	
IP Cameras - SD	51	
IP Cameras - MP	67	
Video Encoders	1	
Network Video Recorder	4	
Nucules Servers	1	
32" LCD Monitor	3	
Viewing Stations - Dual Mon.	3	
VMDC	2	
21" LCD Monitor	2	
Web Server	1	

# <u>Cameras:</u> <u>119</u>